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This Issue in Brief

The introduction of machinery in the glass industry has had a most dramatic effect upon labor productivity and the character of the labor force. To take an extreme example, the output of 4-ounce prescription bottles per employee per hour is more than forty-one times as great with the automatic machines as with the old hand processes. Moreover, the automatic machine does not require the use of skilled glass blowers. Machines are now in general use in the production of standardized wares in large quantities. For small orders and for odd-shaped wares, however, the hand processes are still the more efficient method of production (p. 1).

An act of the recent Congress assures compensation for injuries to longshoremen and other harbor workers while under maritime jurisdiction, after efforts extending over more than 10 years. The United States Employees' Compensation Commission is to provide for the administration of the act, paying 66⅔ per cent of the wages as benefits, with a maximum of $25 weekly. In the absence of appropriations, however, the problem of administration is a perplexing one (p. 18).

The waste of money and men resulting from lack of cooperation in the handling of seasonal agricultural labor is vividly illustrated in the account of the labor conditions during the 1926 apple harvest in the Wenatchee Valley of Washington. Because of miscalculation and misunderstanding, there was first a shortage of labor and then a surplus of undesirable job seekers (p. 13).

According to the report of a German trade-union commission to the United States, money wages for skilled labor and for much of the unskilled labor are from two to five times as high in the United States as in Germany; average real wages are about two and a half times as high in the United States as in Germany; and the higher and more uniform wages in the United States obtain mostly in industries which are unionized or which benefit indirectly from unionization (p. 21).

Sick leave with pay to factory workers, granted according to a definite plan, is provided for by a number of industrial concerns. Thus, a building company on the west coast allows six weeks' wages during the year to all employees, to begin after the third day of sickness. A canning company pays the salaries of all sick and injured employees in full until the employees' sickness committee or the nurse reports them able to return to work (p. 33).

Life expectancy among industrial policyholders increased more than eight years between 1912 and 1925, according to data covering more than 17,000,000 such policyholders of a large insurance company. The health hazard for 1926 was unfavorably affected by the prevalence of influenza during the first four months of the year. Among the diseases which showed increased mortality rates in 1926 were cancer, diabetes, and heart disease, the last named being the leading cause of death in every year since 1921. The death rate from alcoholism was higher in 1926 than for any year since 1917, but was lower than in pre-war years. The death rate from fatal accidents decreased from 63.9 per 100,000 in 1925 to 62. 1 in 1926 (p. 34).

Benefits under the Federal employees' compensation act are increased by act of the recent Congress. The maximum award of $83.33 per week formerly provided for is increased to $116.66, with a minimum of $58.33 unless the pay is less, when benefits are to be the same as the monthly pay (p. 43).

The training and placement of deaf persons in suitable occupations is intrusted to a special division of the Minnesota Industrial Commission. A recent report of that commission states that during the two-year period ending June 30, 1926, 211 deaf persons applied for work to the division of the deaf and 125 were placed. An examination of the vocations selected by deaf graduates of various schools showed that the most popular of these vocations were domestic science, printing, cabinetmaking, shoemaking, carpentry, baking, and tailoring (p. 61).

The total current income of the people of the United States was $90,000,000,000 in 1926, according to an estimate of the National Bureau of Economic Research. This represents an increase of 40 per cent over the estimate for 1921 made by the same organization. Reduced to a per capita basis, the figures for 1921 and 1926 were, respectively, $579 and $770 (p. 77).

That unemployment insurance should be regarded as a permanent part of the English social organization is the conclusion reached by a Government committee appointed to consider and report on the present plan. The committee recommends that the contributions of employers and employees should be lowered; that employers, employees, and the Government should each contribute in equal proportions; that unemployment benefits should be reduced for young people between 18 and 21; and that no absolute limit should be set on the period through which benefits may be drawn. The fund should be planned to meet the average percentage of unemployment throughout a trade cycle (p. 47).

An official study of the individuals covered by the British unemployment insurance system developed some very interesting results. From 1920 to July, 1925, the English male worker in the insured industries had paid, on the average, contributions to the unemployment insurance fund through 233 weeks, and had drawn unemployment benefit for 122 days. For women, the proportion was different, the average number of weekly contributions being 161, and the average time through which benefit was drawn being 69 days. Of a sample group numbering over 58,000, practically 46 per cent of the males and 52 per cent of the females had drawn no benefit at all (p. 45).

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Displacement of Labor by Machinery in the Glass Industry

IN NO other industry has the introduction of machinery had a more dramatic effect upon labor productivity than in the glass industry. Thus, to take an extreme example, in the blowing of 4-ounce prescription bottles, the average output per man is more than forty-one times as great with the automatic machine as with the hand processes which were in general use up to less than 20 years ago. This means a great reduction in the number of workers necessary to turn out a given quantity of product. It also means a great change in the character of the labor force. Instead of a group of very highly skilled glass blowers, assisted by a group of unskilled "boys," the automatic machine employs mechanics and machine operators, with little or no demand for child labor.

These revolutionary changes in the glass industry have taken place within a period of 25 years. The advent of the twentieth century found the glass industry in the United States still in the stage of hand production. With the exception of a few experimental semiautomatic machines used for the making of vaseline jars, the process of blowing bottles and other glassware was essentially the same as that used in Egypt some 3,500 years ago. In 1925, hand production had all but disappeared from the field. Its place was taken first by the semiautomatic and more recently by the automatic machines. The history of this change, and its effects on labor productivity and labor cost in the glass industry, are set forth in a bulletin soon to be published by the United States Bureau of Labor Statistics entitled, "Labor productivity in the glass industry." The present article is a summary of the most important stages and the most striking results of this change.

Comparisons of Labor Output and Cost in Hand and Machine Production

HOW far-reaching these results have been will become self-evident from the following few but highly illuminating examples:

Bottles.—A hand "shop," consisting of 3 skilled workers (a gatherer, a blower, and a finisher) and 4 helpers, can produce on the average 3.75 gross of 4-ounce prescription ovals per hour. The 1925 average output of the most up-to-date Owens automatic machine was 69.754 gross of 4-ounce prescription ovals per hour. The average output of the hand shop is 0.536 gross per man per hour, while with the automatic machine the average is 22.028 gross per man per hour, or more than forty-one times as much as in the hand process.

Based on the 1925 wage rates, the direct blowing labor cost of a 4-ounce prescription oval made by hand would be $1.177 per gross. With the Owens automatic machine, the 1925 direct blowing labor cost of the same kind of bottle was 3.15 cents per gross. For every dollar spent on blowing a 4-ounce prescription oval by hand, the labor cost on the Owens automatic machine was but 2.70 cents.

Pressed ware.—In making 8–9 ounce common table tumblers on the side-lever press, a hand shop, consisting of 3 skilled workers (a gatherer, a presser, and a finisher) and 6 helpers, produced in 1925 an average of 278.96 pieces per hour, or 31 pieces per man per hour. The Hartford Empire twin press, operated with an automatic conveyor, produced in 1925 an average of 1,903.54 pieces per hour, or 380.71 pieces per man per hour, more than twelve times as much as could be produced with the hand press. The direct labor cost of pressing 100 of these tumblers was with the hand press, $1.95 and with the automatic press, 13 cents. Thus, for every dollar spent on the direct labor of pressing common table tumblers by hand it cost but 6.7 cents to press them on the automatic machine.

Electric-light bulbs.—A hand shop, consisting of a gatherer and a blower, assisted by a section boy and a cutting-off boy, can produce on the average 121.98 40-watt electric-light bulbs per hour, or 54.21 pieces per man per hour. The 1925 average output of the new type Westlake automatic machine was 2,342.44 bulbs per hour, or 1,703.59 pieces per man per hour, more than thirty-one times as much as by the hand process. The average blowing labor cost by the hand process was $13.88 per 1,000 pieces, as compared with $0.470 by the machine process. The saving in labor cost effected by the automatic machine was 96.61 cents on every dollar required for the hand process.

Glass tubing.—A hand shop, consisting of 4 skilled workers (a gatherer, a ball maker, a marverer, and a gaffer) and 4 unskilled helpers, can produce on the average 80.54 pounds of glass tubing, sizes 32 to 34, inclusive, or an average of 10.07 pounds per man per hour. In 1925, the Danner tube-drawing machine, working on the same sizes of tubing, produced on the average 300.70 pounds per hour or 75.17 pounds per man per hour, which is seven and one-half times as much as by the hand method. The blowing labor cost by the hand process averages $6.83 per 100 pounds, while with the Danner machine the cost is only $1 per 100 pounds. Thus, for every dollar spent for labor on blowing glass tubing by hand it costs but 14.7 cents to blow it by the Danner machine.

Window glass.—A hand shop, consisting of one gatherer, one blower, and one snapper, can produce on the average 2.72 boxes, each containing 50 square feet of single-strength window glass, per hour, or 0.709 box per man per hour. On the Fourcault automatic machine, the average 1925 output was 7.68 boxes per hour, or 1.85 boxes per man per hour, more than two and a half times as much as by the hand process. The average direct blowing labor cost by the hand process was 95.5 cents per box, as compared with the average cost of 29.9 cents per box made on the Fourcault automatic machine, the use of the machine meaning in this case a saving of nearly 70 cents on every dollar spent for blowing by the hand process.

Plate glass.—The output of casting rough plate glass by the discontinuous process, which is still prevalent in the industry, is

43.89 square feet per man per hour; by the continuous automatic process, recently introduced, the average is 63.63 square feet per man per hour, or 45 per cent more than by the old process. In the case of polished plate glass, the man-hour output by the discontinuous process averages 7.66 square feet, while that by the continuous process is 12.30 square feet, or 60.5 per cent higher. The total labor cost of casting rough plate glass by the continuous process is 25.1 per cent less than by the discontinuous process, and the total labor cost of making polished plate glass is on the average 43.3 per cent less than by the discontinuous process.

Development of Machinery in the Industry

THE glass industry is composed of a number of branches whose only common characteristic is the molten glass from which the respective commodities are made. The nature of the ware made and the methods of production, whether by hand or by machine, are entirely different in the separate branches. The development of machinery also has not been uniform and simultaneous in all the branches. To all intents and purposes, therefore, the five separate branches may be considered as independent industries manufacturing, respectively: Bottles and jars, pressed ware, blown ware, window glass, and plate glass.

Manufacture of Bottles and Jars

In his book, Machinery and Labor, Prof. G. E. Barnett, of Johns Hopkins University, distinguishes three periods in the development of machinery for the purpose of making bottles and jars: (1) 1898–1905, during which was developed semiautomatic machinery for the making of wide-mouth ware exclusively; (2) 1905–1917, characterized by the introduction of the Owens automatic machine for the making of all kinds of bottles, both wide and narrow mouth, and of semiautomatic machinery for the manufacture of narrow-mouth ware; (3) 1917 to date, during which time semiautomatic machinery has been made automatic by "feed and flow devices."

The first more or less successful semiautomatic machine was invented in 1882 by Philip Arbogast, of Pittsburgh, Pa., and 11 years later this machine was successfully applied for the purpose of making vaseline jars. In 1896, a similar machine was invented for the purpose of making Mason jars. The growth of the semiautomatic machine from 1897 to 1905, as shown by the number of machines in use in each of those years, is given by Professor Barnett as follows: 1897, 20 machines; 1898, 50 machines; 1899, 60 machines; 1900, 80 machines; 1901, 90 machines; 1902, 100 machines; 1903, 150 machines; 1904, 200 machines; 1905, 250 machines.

But the first really revolutionary change took place in 1904, with the successful introduction of the automatic machine, invented by M. J. Owens. This machine, where used, at once displaces all the skilled blowers and most of their helpers in the shops. The output of the new machine was so much greater and the cost of production so much less than by the hand and the semiautomatic processes, that had it not been for the restrictive policies of the owners of the Owens machine, these less economical processes would at once have been displaced by the automatic machine.

As it happened, however, the period of the Owens automatic machine was also the period of the development of semiautomatic machinery. In 1917, there were 200 Owens machines in operation in this country, but there were also in use 428 wide and narrow-mouth semiautomatic machines. At about this time, also, the "gob" feeder, which had been experimented with for some time, became a commercial success. This appeared to have certain advantages over both the Owens automatic and the semiautomatic machines. In the course of the next eight years the majority of the semiautomatic machines were reconstructed and equipped with automatic feeders so as to become completely automatic. The Owens machine has also undergone a series of important changes, especially as to the number of arms and the number of molds on each arm. The most modern type of Owens machine has 15 arms, each equipped with two molds, and each mold containing cavities for two or three bottles, depending on the size of the bottle. (See figs. 1 and 2.) At present, these automatic processes completely dominate the bottle-making industry. The semiautomatic process has disappeared entirely, but a small number of plants are still using the hand process for bottles which can not be made more economically on the machine.

Manufacture of Pressed Ware

Although the introduction of the side-lever press dates back to 1827, the general introduction of machinery in this branch of the industry took place much later and is less significant than that in the bottle industry. The side-lever press is still used in a large number of plants. During the first part of this century the semiautomatic rotary press was introduced, but the greatest change came with the introduction of feeding devices. Modern machines equipped with these devices are made after the pattern of the bottle-blowing machines, but are less complicated. They are used primarily for making pressed tumblers of all sizes, nappies, and sherbets. The largest proportion of pressed ware, especially the so-called "novelties," is still, however, made either on the old-fashioned side-lever press or on the rotary press.

Manufacture of Blown Ware

In the field of blown ware, the development of machinery has been much more pronounced than in the case of pressed ware. The machines used are also more complicated and specialize in the production of some particular article, such as lamp chimneys, electric-lamp bulbs, punch tumblers, and glass tubing.

The lamp-chimney semiautomatic machine dates back to 1894. Since then it has undergone a number of changes, but on the whole very little progress has been made in this branch of the glass industry. Hand production, especially the offhand method, is still an important factor, but the industry as a whole is diminishing in importance, as electricity is rapidly displacing the use of oil-burning lamps even in the most outlying and inaccessible districts.

On the other hand, the most amazing progress has been recorded in the making of electric-lamp bulbs. Since 1917, hand production has been almost entirely displaced, first by the semiautomatic Empire E machine, and more recently by the completely automatic Westlake

FIG. 1.—BLOWING BOTTLES BY HAND

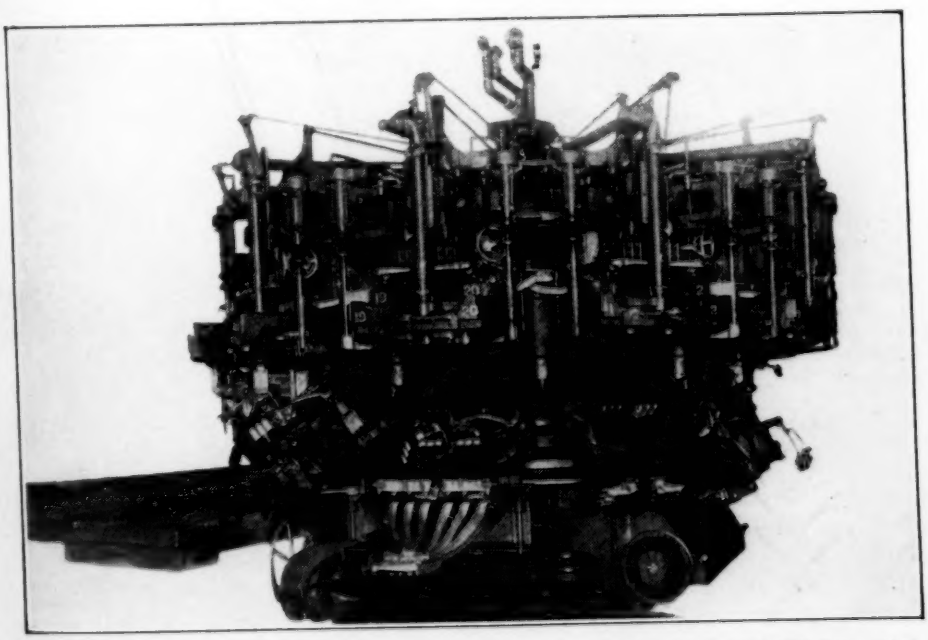


FIG. 2.—OWENS AUTOMATIC BOTTLE MACHINE (60 BOTTLES PER REVOLUTION)

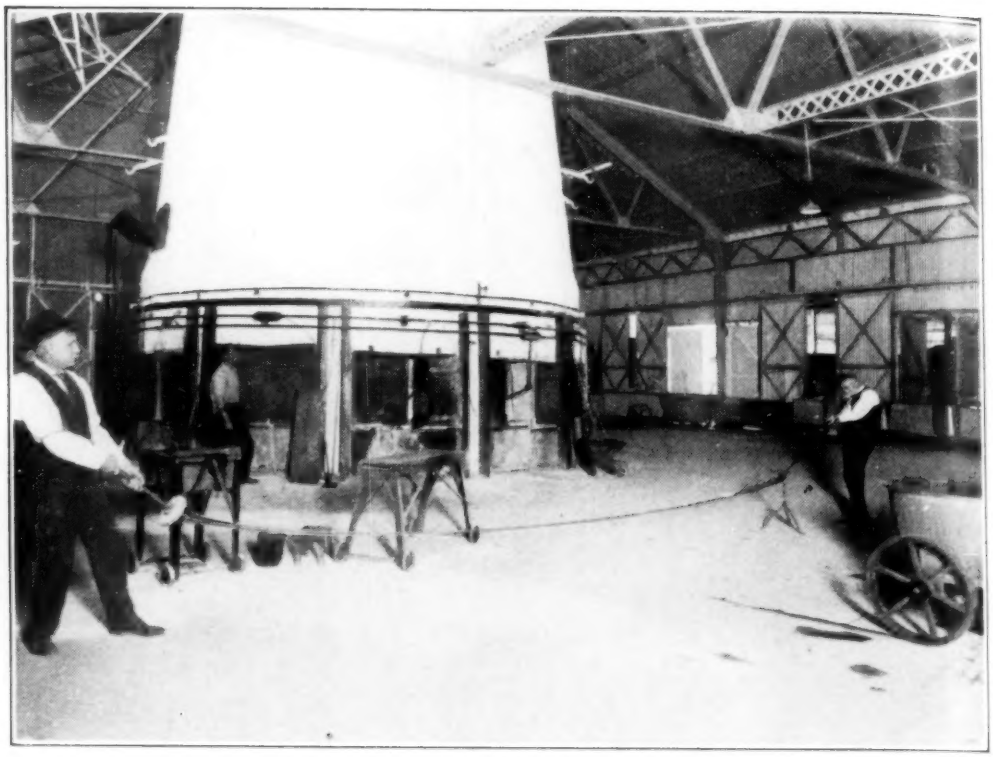


FIG. 3.—MAKING GLASS TUBING BY HAND METHOD

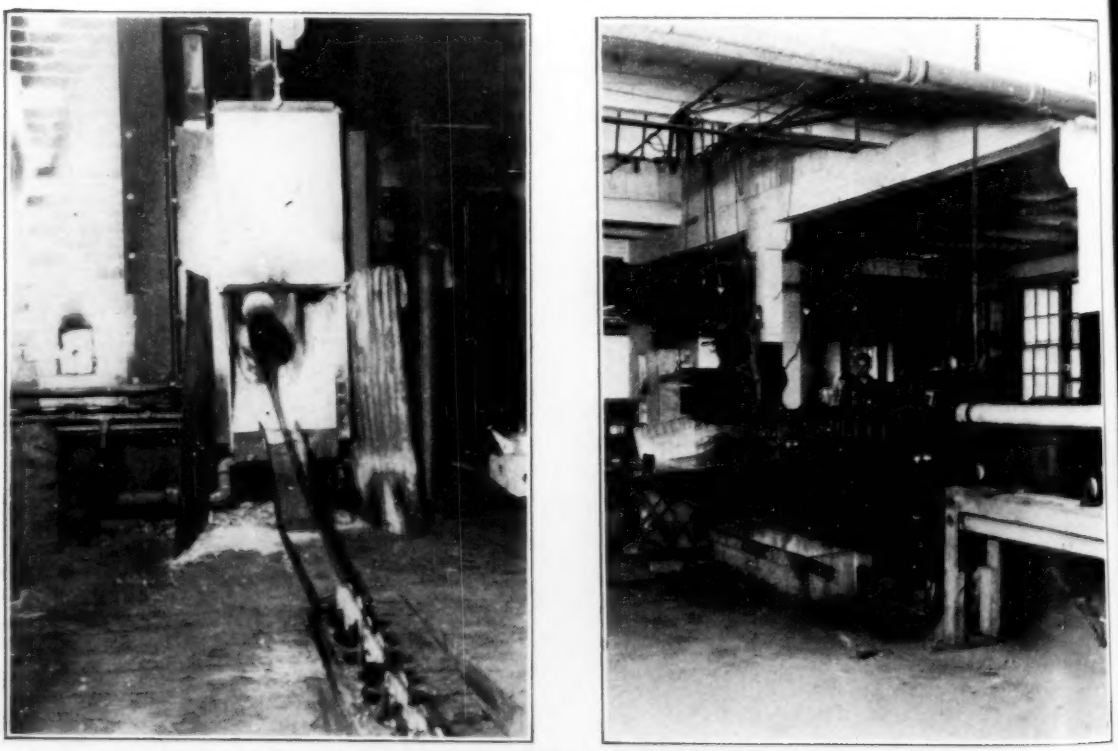


FIG. 4.—DANNER TUBE-DRAWING MACHINE—DRAWING FURNACE (LEFT); DRAWING AND CUTTING APPARATUS (RIGHT)

machine and the Empire F machine operated with an automatic feeder. At present, more than 95 per cent of all the electric bulbs are made by the two automatic processes. The semiautomatic machine has been almost completely abandoned, while a few hand shops have been retained for experimental purposes, or for the purpose of making oddly shaped and colored electric bulbs.

The Westlake machine, which revolutionized the bulb-making industry, has also recently invaded the field of punch tumblers. These are now made either on the Westlake machine or as a by-product on the lamp-chimney semiautomatic machine. Only the most expensive tumblers, those decorated with special designs, are still made by the hand shops.

The year 1917, which brought with it so many revolutionary innovations in the bottle and pressed and blown ware branches of the industry, witnessed also the introduction of the Danner machine for the making of glass tubing. (See figs. 3 and 4.) The new method was so superior to the old hand process that, in the comparatively short period of less than eight years, it so thoroughly displaced the old process that not a single shop can now be found making glass tubing by hand.

Manufacture of Window Glass

The introduction of the Lubber cylinder machine in 1905 was the first successful attempt to replace by machine the hand process of making window glass. The cylinder process may be called semiautomatic, as considerable handling of the glass is required in the various stages of its journey from the tank to the cutter's table. In 1917, the Colburn process of automatically drawing a continuous sheet of glass from the tank became a commercial success, while in 1921 the Fourcault automatic process, invented in Belgium, was successfully introduced into this country. (See figs. 5 and 6.) As a result very little window glass is at present made in this country by the hand process. The cylinder machine is still the dominating factor in the industry, but the improved Colburn process and more recently the Fourcault machine have been rapidly gaining on the cylinder process and are becoming very important.

Manufacture of Plate Glass

The story of plate glass is essentially different from that of any other branch of the glass industry. It has been from the very beginning a nonskilled industry, and the many simple operations involved in the process of handling the large and heavy plates soon suggested the use of labor-saving devices. When the industrial revolution finally reached the other branches of the glass industry, plate glass had already become a progressive, well-integrated industry. Recently, however, the introduction of the continuous tank and the automatic process of casting rough plate, and the conveyor method of grinding and polishing the plates, have tended to bring about changes in the plate-glass branch almost as revolutionary as those in the other branches of the industry. The continuous process has not yet reached the stage of unquestioned superiority over the older, so-called discontinuous process, and some time will probably elapse before the industry universally adopts the new process. (See figs. 7 and 8.)

Effects of Automatic Machinery on the Industry as a Whole

IN VIEW of the tremendous changes in man-hour output and labor cost due to automatic machinery, it may be worth while to examine more or less in detail the effects of the introduction of machinery on the industry as a whole. Table 1, compiled from census reports, shows the growth of the industry from 1899 to 1925 (the period during which the change from hand production to semiautomatic and automatic machinery took place) for the industry as a whole, and also, where available, for the four principal branches whose combined output constitutes more than 90 per cent of that of the industry.

TABLE 1.—DEVELOPMENT OF THE GLASS INDUSTRY, IN SPECIFIED YEARS, 1899 TO 1925

Item	1899	1904	1909	1914	1919	1921	1923	1925
Total number of establishments	355	399	383	348	371	329	333	310
Bottles and jars	147	158	166	150	145	(1)	117	120
Pressed and blown ware	84	105	114	107	130	(1)	127	123
Window glass	100	103	(1)	64	79	(1)	65	42
Plate glass	16	17	(1)	19	17	(1)	17	19
Total number of wage earners	52,818	63,969	68,911	74,502	77,520	54,748	73,335	69,371
Bottles and jars	28,370	(1)	(1)	(1)	(1)	(1)	24,010	21,704
Pressed and blown ware	12,546	(1)	(1)	(1)	(1)	(1)	27,196	21,507
Window glass	8,682	(1)	(1)	(1)	(1)	(1)	8,826	8,346
Plate glass	3,220	(1)	(1)	(1)	(1)	(1)	9,961	11,124
Output:								
Bottles and jars ----------thousand gross	7,780	12,005	12,316	19,290	22,295	(1)	28,393	26,044
Pressed and blown ware ----------million pieces	360	428	532	701	1,080	(1)	(1)	1,963
Window glass ----------thousand boxes	4,341	4,852	6,922	8,020	7,380	5,201	10,204	11,343
Plate glass...thousand sq. ft	16,884	27,293	47,370	60,384	56,823	56,239	94,470	117,369
Value of output (000 omitted)	$56,540	$79,603	$92,095	$123,085	$261,884	$213,471	$309,353	$295,959
Bottles and jars	21,677	33,631	36,018	51,959	94,670	(1)	107,231	100,301
Pressed and blown ware	17,076	21,956	27,398	30,279	70,749	(1)	77,279	72,085
Window glass	10,879	11,611	11,743	17,495	41,101	24,026	42,623	37,525
Plate glass	5,159	7,978	12,205	14,774	33,343	37,261	66,103	57,207
Wages (000 omitted)	27,084	37,288	39,300	48,856	87,527	68,224	89,898	86,738

[1] Not reported.

Establishments and Wage Earners

As shown in the table, the glass industry in 1899 comprised 355 establishments, employing 52,818 wage earners, an average of 149 wage earners per establishment; in 1925 there were only 310 establishments, but these employed 69,371 wage earners, an average of 224 wage earners per establishment. In the course of the 25 years, the number of establishments decreased 12.7 per cent, while the number of wage earners increased 31.3 per cent, and the average number of wage earners per establishment increased 50.3 per cent.

The figures for the industry as a whole, however, do not tell the story of what happened in the separate branches. In the bottle and jar branch, the general adoption of the automatic machines resulted not only in a diminution of the number of plants and wage earners in the industry, but also in a decrease of the average number of wage earners per establishment. Fewer workers are seen in a large up-to-date machine bottle plant than in a small hand plant. In the pressed and blown ware branch the automatic machines have so far invaded only a small part of the industry, and this branch has an increased number of plants and wage earners, as well as an increase in the average number of workers per establishment. In

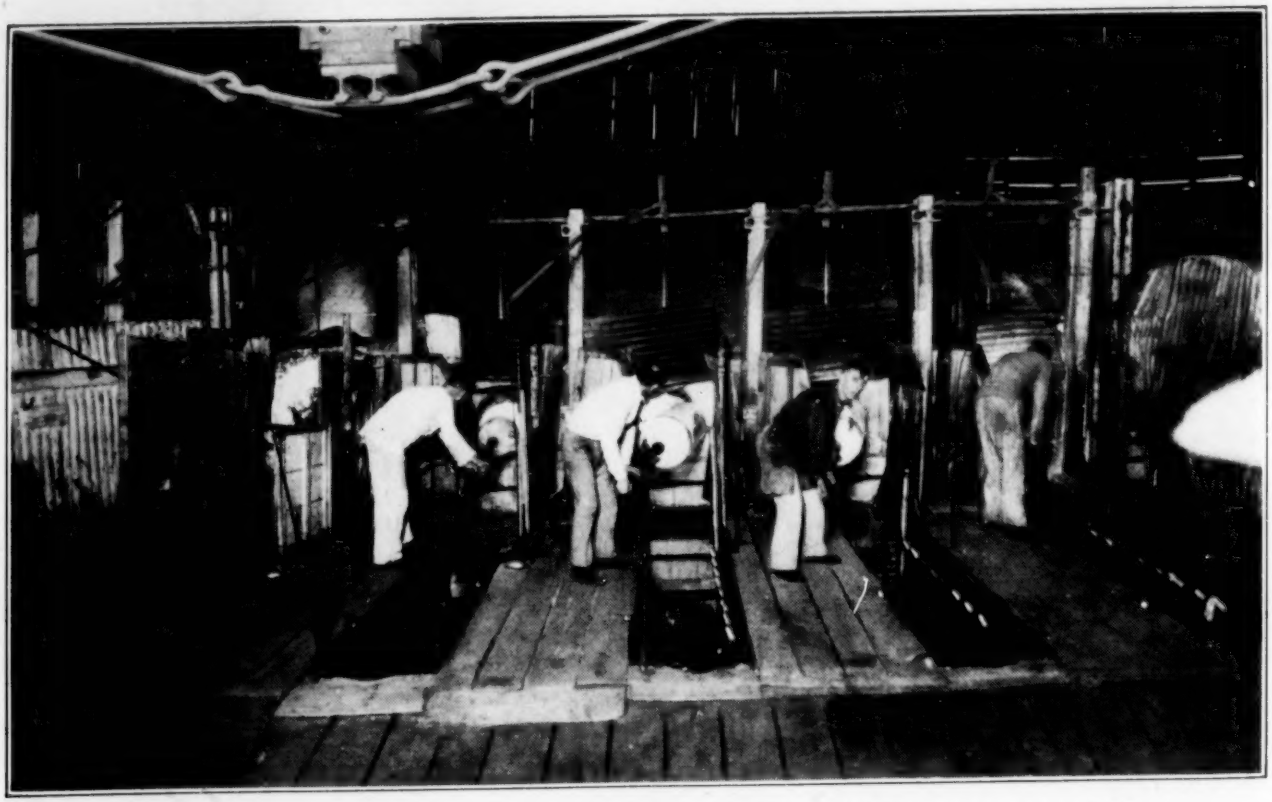


FIG. 5.—FINISHING THE BLOWING OF HAND-BLOWN WINDOW GLASS ROLLERS

FIG. 6.—FOURCAULT WINDOW GLASS AUTOMATIC MACHINE

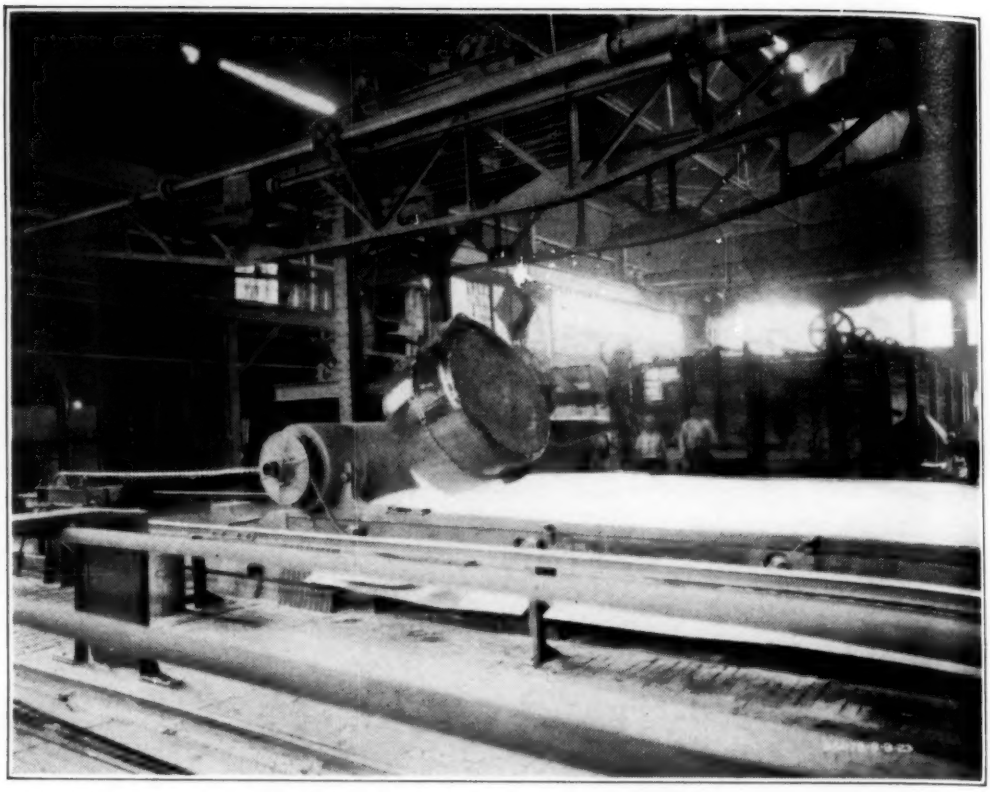


FIG. 7.—CASTING ROUGH PLATE GLASS BY DISCONTINUOUS PROCESS

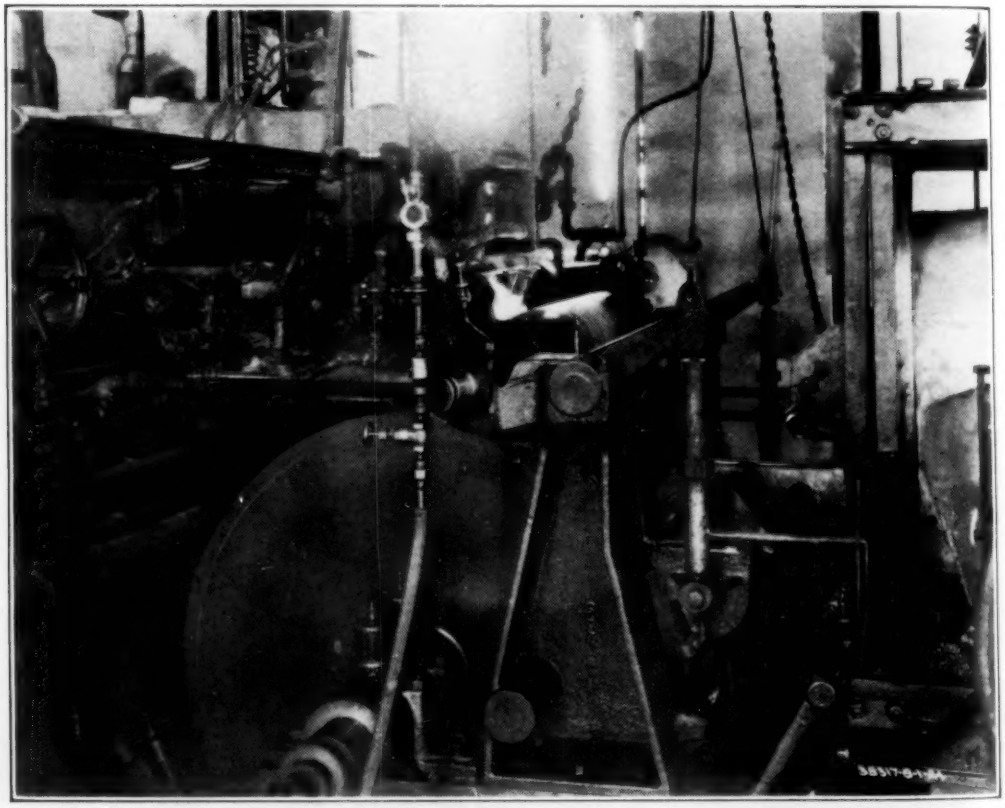


FIG. 8.—CASTING PLATE GLASS BY CONTINUOUS PROCESS. GLASS AUTOMATICALLY FLOWS FROM TANK UNDER ROLLER AND INTO LEER

the window-glass branch, the predominance of the cylinder-machine process has cut the number of establishments over half, somewhat diminished the total number of wage earners, and increased the average number of wage earners per plant nearly one and one-third times. In the plate-glass industry, which until very recently witnessed no revolutionary changes, the growth of industry more than tripled the number of wage earners and nearly tripled the average number of workers per establishment.

Size of Establishments

The number of workers employed and the average number per establishment can not, however, be used as an indication of the change in the size of the establishment, for the reason that the primary object of the introduction of machinery has been to decrease the number of wage earners employed. This is especially true of the bottle and jar branch of the industry. A better means of measuring the size of an establishment may be found either in the quantity or the value of output. For a period of years the quantity of output is more effective, as it remains more or less untouched by changes in prices, which exert a disturbing influence on the value of the output.

In 1899, the average output per establishment in the four branches was: Bottles and jars, 52,925 gross; pressed and blown ware, about 4,286,000 pieces; window glass, 43,410 boxes; and plate glass, 1,055,200 square feet. In 1925 it was: Bottles and jars, about 217,000 gross; pressed and blown ware, 15,959,000 pieces; window glass, 270,100 boxes, and plate glass, 6,177,000 square feet. Thus, in 1925, the average output per establishment was 4.1 times as much as in 1899, in the case of bottles and jars; 3.7 times as much in the case of pressed and blown ware; 6.2 times as much in the case of window glass, and 5.9 times as much in the case of plate glass.

The distribution of total number of establishments and the value of their output on the basis of the value of output in each establishment is even more significant of the changes in the size of establishments than the actual output per establishment. Table 2 shows the total number of establishments in 1904 [1] and 1925 divided according to the value of the yearly output:

TABLE 2.—NUMBER OF ESTABLISHMENTS IN THE GLASS INDUSTRY AND VALUE OF THEIR PRODUCT, 1904 AND 1925, BY CLASSIFIED VALUE OF PRODUCTS

Establishments with yearly value of product of—	Number of establishments		Total value of product	
	1904	1925	1904	1925
Under $100,000	164	49	$8,341,000	$2,652,000
$100,000 and under $1,000,000	230	178	62,274,000	78,754,000
$1,000,000 and over	5	83	8,993,000	214,553,000
Total	399	310	79,608,000	295,959,000
	Per cent			
Under $100,000	41.1	15.8	10.5	0.9
$100,000 and under $1,000,000	57.6	57.4	78.2	26.6
$1,000,000 and over	1.3	26.8	11.3	72.5
Total	100.0	100.0	100.0	100.0

[1] Data are not available for 1899.

As shown in the table, the tendency has been for the manufacturing units to become steadily larger. Thus in 1904 only 11.3 per cent of the total value of all glass products was produced in plants with annual products valued at $1,000,000 or over. In 1925 this percentage had grown to no less than 72.5.

Prior to the introduction of machinery, the glass industry was predominately a small-unit industry. The amount of capital needed for a plant was small, and the principal item of expenditure, outside of labor, was fuel. A cheaper rate on coal or natural gas was enough of an inducement for the removal of a glass plant from one locality to another and from State to State. The history of the discoveries of natural gas in Pennsylvania, Indiana, West Virginia, and Oklahoma also tells the story of the migrations of the glass industry to and from these States.

But with the advent of machinery, the situation changed completely. Fuel is still a very big item in the cost of production of glass, and is still considered as the factor determining the site of a new glass establishment. But once the plant is built, the capital outlay on the building, the furnaces, and the machines, and other items prevent the moving of the establishment irrespective of the cost of fuel. Thus, as migration was eliminated, the advantages of large-scale production were at once brought into play, with the result that in the short span of 25 years, the glass industry has been converted from a small and loosely connected industry into a large and well-integrated one.

Output and Productivity

FROM the labor standpoint, the most important change directly connected with the introduction of machinery in the glass industry has been the increase in output per wage earner employed. Table 3 shows a comparison of output per man in the 4 principal branches of the glass industry in 1899 and 1925. As there shown the increase in 1925 over 1899 was greatest in the case of bottles and jars, 338 per cent; and lowest in the case of plate glass, 101.3 per cent.

TABLE 3.—YEARLY OUTPUT PER MAN IN SPECIFIED BRANCHES OF THE GLASS INDUSTRY, 1899 AND 1925

Branch of industry	Unit	1899	1925	
			Quantity	Per cent of increase over 1899
Bottles and jars	Gross	274	1,200	338.0
Pressed and blown ware	Pieces	28,694	91,272	218.1
Window glass	Boxes	500	1,359	171.8
Plate glass	Square feet	5,240	10,551	101.3

In the figures for the separate branches of the industry there exists a slight error, due to the fact that the hours worked per day in 1899 and 1925 are not strictly comparable. For instance, in the bottle industry the regular hours of work were eight and one-half in 1899 and only eight in 1925. On the other hand, in 1899 nearly all the plants, following a long-established custom, suspended production for a period of two months, while in 1925 only a few plants stopped

producing for a month or more, because of repairs or the usual reconstruction of tanks, which must be done every 12 to 18 months. Similar or somewhat different discrepancies in the hours worked also exist in the other branches of the industry, but their general effect on the output was so slight as to exert very little, if any, influence on the validity of the figures of productivity given.

Value of Output

IN 1899, the 7,780,000 gross of bottles and jars produced were valued at $21,677,000, an average of $2.79 per gross; in 1925, the value of the 26,044,000 gross produced was $100,301,000, an average of $3.86 per gross, and an increase of 38.4 per cent over the average value of 1899. In the pressed and blown ware branch of the industry, the 360,000,000 pieces produced in 1899 were valued at $17,076,000, an average of $4.74 per hundred pieces. In 1925, the 1,963,000,000 pieces produced were worth $72,085,000, making the average $3.67 per hundred pieces, or 22.6 per cent lower than in 1899. In the window-glass branch, the 4,341,000 boxes produced in 1899 were valued at $10,879,000, an average of $2.50 per box. In 1925, the 11,343,000 boxes were worth $37,525,000, an average of $3.31 per box, or 32.4 per cent higher than in 1899. In the plate-glass branch, the 16,884,000 square feet of polished glass produced in 1899 were worth $5,159,000, making the average $30.56 per hundred square feet. In 1925, the 117,369,000 square feet produced were worth $57,207,000, an average of $48.74 per hundred square feet, which is 59.5 per cent higher than the average of 1899.

Table 4 compares the trend of these average values in the four branches of the industries, and of wholesale prices of manufactured commodities, from 1899 to 1925.

TABLE 4.—AVERAGE UNIT VALUES OF PRODUCT AND INDEX NUMBERS THEREOF AND OF WHOLESALE PRICES OF MANUFACTURED COMMODITIES IN SPECIFIED YEARS, 1899 TO 1925

Year	Average value of product				Index numbers of—				
					Average value of product				Wholesale prices of manufactured commodities [1]
	Bottles and jars (per gross)	Pressed and blown ware (per 100 pieces)	Window glass (per box)	Plate glass (per 100 square feet)	Bottles and jars	Pressed and blown ware	Window glass	Plate glass	
1899	$2.79	$4.74	$2.50	$30.56	100.0	100.0	100.0	100.0	100.0
1904	2.80	5.13	2.40	29.23	100.0	108.2	96.0	95.6	109.8
1909	2.93	5.15	1.70	25.78	105.0	108.6	68.0	84.4	124.6
1914	2.70	4.33	2.18	24.47	96.8	91.4	87.2	80.1	128.7
1919	4.25	6.54	5.57	58.68	152.3	138.0	222.8	192.0	273.4
1921	(2)	(2)	4.61	66.25	----	----	184.4	216.8	188.2
1923	3.78	(2)	4.18	69.96	135.5	----	167.2	228.9	188.7
1925	3.86	3.67	3.31	48.74	138.4	77.4	132.4	159.5	203.3

[1] Recomputed from indexes given in U. S. Bureau of Labor Statistics Bul. No. 415, p. 31.
[2] Not reported.

In average unit values each branch of the industry seems to have a trend entirely different from any other branch, due to conditions inherent in that branch. For instance, window glass and plate glass as building materials are largely affected by the general conditions

in the building industry. This accounts for the drop in their values in 1909 and the steep rise in 1919, as compared with the value of bottles and jars or of pressed and blown ware. Again, for a number of years plate glass has been in great demand for the automobile industry, and in 1921, in spite of the depression in the other branches of the glass industry and in the wholesale price index of manufactured commodities, the value of plate glass continued to rise through 1923, when the introduction of the continuous process began to exert its influence and values began to drop.

On the whole, however, the general trend of the four branches of the industry is unmistakably downward, and, with the exception of plate glass, none of the average unit value indexes rose during the period above the wholesale price index of manufactured commodities.

Wage Workers' Earnings

A COMPARISON of rates of wages in the glass industry in 1899 and 1925 is of no significance, for the reason that the nature of the work done and the kind of labor used in 1925 were entirely different from the work done and the labor used in 1899. Twenty-five years ago the majority of workers employed in the industry consisted of highly-skilled blowers, pressers, finishers, gatherers, flatteners, and cutters, and unskilled mold boys, snapping-up boys, warming-in boys, carry-in boys, carry-over boys, and the like. In 1925, only a small percentage of such labor had been retained even in the hand plants. The new class of glass workers is made up of tank men, machinists, machine foremen, machine operators, and helpers, with little if any preliminary training in handling machines. Again, in 1899 all skilled workers were paid on a piecework basis, while in 1925 the overwhelming majority of workers were paid on a time basis—by the hour, by the week, or by the month.

It is possible to compare the yearly earnings of the wage earners in 1899 and in 1925. In 1899 the 52,818 wage earners in the industry received a total wage of $27,084,000, an average of $512.78 per wage earner per year. In 1925 the 69,371 wage earners received a total wage of $86,736,000, an average of $1,250.32 per wage earner per year, or nearly 2½ times as much as in 1899. But in making these comparisons it must be remembered that the group of wage earners in 1899 contained a large percentage of workers under 16 years of age, with extremely low wages; whereas in 1925 the number of minors under 16 years was practically nil. This difference would tend considerably to depress the average earnings per man in 1899 as compared with 1925. On the other hand, many of the skilled workers in 1899, working on a piece-rate basis, were earning exceptionally high wages. Fifty to seventy-five dollars a week was not an exceptionally high wage for a skilled bottle or window-glass blower in those days. In 1925 this extreme had also been eliminated. How far the high earnings of the skilled workers in 1899 were neutralized by the very low earnings of the minors can only be guessed, but the existence of the two extremes can not be overlooked when comparing the average earnings of the two periods.

Child Labor in the Industry

PRIOR to the introduction of machinery, the glass industry was one of the greatest exploiters of child labor. This was particularly true of the bottle and pressed and blown ware branches, for very few children had ever been employed in the making of window glass and none in plate glass. In 1899, of the total of 40,916 wage earners employed in making bottles and pressed and blown ware, 7,035, or 17.2 per cent, were children under the age of 16 years. These were employed chiefly as mold boys, cleaning-off boys, and snapping-up boys in the furnace room, and partly as burning-off girls, glazing girls, and selectors in the finishing department.

The conditions under which the children were employed are fully discussed in the Commissioner of Labor's Report on Condition of Woman and Child Wage Earners in the Glass Industry in the United States made at the request of the United States Senate and published in 1910. The following quotations are from this report. Referring to the work of the mold boy it says:

> The mold rests upon or very close to the floor. As a result the mold boy must either squat upon the ground in an awkward, cramped position * * * or, standing, must stoop constantly to his work. When the mold boy must thus sit with his legs doubled under him, or sitting on a crude chair or box, stoop over almost to the floor to operate the molds, the occupation becomes one which, continued for any great length of time, undoubtedly tends to dwarf and deform the child.
>
> He must necessarily be close to the mold, and for speed of working the mold is placed near the furnace, directly in front of the working hole and some 3 feet below the level of the hole. As the mold tender works he faces the furnace, and his face and shoulders at least are in direct line with the radiated heat from the working hole. In addition to the furnace, there are other sources of heat adding to the boy's discomfort: The blower in lowering the hot lump of glass into the mold necessarily swings it close to the boy's face; the mold itself, after a short using, becomes very hot and gives off considerable heat; in some factories the "glory holes," at which the finishing work is done, are crowded close to the furnace, and little space left between them and the mold boys (p. 48.)

The general conditions in the furnace room are thus described:

> In some factories at times the air is so full of floating glass from the "blow-over" that the hair is whitened by merely passing through the room. It sticks to the perspiration on the face and arms of the boys and men and becomes a source of considerable irritation. Getting into the eyes, it becomes especially troublesome.
>
> In other factories visited it was found that when the wind blew from the gas producers toward the furnace room, the air of the whole room became filled with gas and smoke almost to the point of suffocation (pp. 66–92).

The heat conditions in the furnace room are set forth as follows:

> The generally accepted figures of the heat within a furnace during the "fusing" is 2,507° F. between the pots and 2,390° F. in the metal itself. These temperatures are reduced when the holes are opened for working to a standard of 1,913° F., although glass is commonly worked at a temperature of a hundred degrees less than these figures.
>
> Factory No. 2 was examined June 18, at 12.25 p. m. with the outside temperature at 90°. The temperature taken at a point two feet from but directly in front of a working hole showed 142°, two others taken the same distance from but slightly to the side of the holes showed 135° and 137°. Temperature near cleaning-off boy, 105°; near the mold boy 113°; in front of the "glory hole," 116°; at finisher's bench, 104°; where snap-up boy stands to rub excess glass off neck of bottle, 103°; where carry-in boy picks up ware, 98°; in front of leer, where carry-in boy stands to deposit ware, 125°.
>
> In warmer weather the ill effects of the heat show themselves directly in the form of prostration or affections directly due to the high temperature. In the

winter the immediate danger to health arises from sudden changes in temperature. The boys, as a rule, have little or no extra clothing to protect them from the outside weather and rarely take the trouble to wait in the factory until their bodies are sufficiently cooled to bear the change. The danger is particularly acute when night work is being done (pp. 69–80).

On accidents and causes of death and diseases it is said:

Conditions in nearly all furnace rooms are favorable to minor accidental injury (p. 91).

Many of the boys bear the scars of severe burns. In the crowded factories where so many of them are constantly moving to and fro carrying the hot bottles, occasional collisions are inevitable, and some of the boys show the marks of these terrible burnings in the form of scars which they will bear all through their lives. It is indeed a hard and trying life they lead, these boys of 9, 10, 11 years and upwards, for many such are in the factories (p. 254).

With the introduction of machinery in the industry the child-labor situation changed. The mold boys, the cleaning-off boys, and the snapping-up boys were at once dispensed with, even in the case of the cruder and semiautomatic machines. The job of the carry-in boys was retained for some time, but the introduction of the Owens automatic machine, with its automatic conveyor, eliminated all the work formerly done by child labor. Even where no conveyors have been installed and the job of the carry-in boys has been retained, the output of the machines has proved to be too large to be handled by minors, and the job, though retaining the name of "carry-in boy," is actually performed by an adult unskilled man or woman.

Table 5 gives the total number of wage earners and of children under 16 years employed in the industry from 1880 to 1919, the last year for which figures are available from the census reports:

TABLE 5.—NUMBER OF WAGE EARNERS AND OF MINORS UNDER 16 YEARS EMPLOYED IN THE GLASS INDUSTRY, BY SPECIFIED YEARS, 1880 TO 1919

Year	Number of wage earners	Minors under 16 years	
		Number	Per cent of total wage earners
1880	24,177	[1] 5,658	23.4
1890	44,892	[1] 6,943	15.5
1899	52,818	7,116	13.5
1904	63,969	6,435	10.1
1909	68,911	3,561	5.2
1914	74,502	1,992	2.7
1919	77,520	1,413	1.8

[1] Males under 16 years and females under 15 years.

From 1880 to 1899 the number of minors under 16 years increased from 5,658 to 7,116, but this increase was not so fast as that of the total number of wage earners in the industry. The percentage that minors formed of the total number of wage earners decreased therefore from 23.4 to 13.5, though the actual number increased 25.7 per cent.

Beginning with 1904, both the actual number and the percentage minors formed of the total decreased, while the total number of wage earners continued to rise rapidly. In 1919, the last year for which official figures are available, there were 1,413 minors, only 1.8 per cent of the 77,520 wage earners in the industry. Child labor in the glass industry has now become almost a matter of the past, and credit for this is due in no small measure to Michael J. Owens, the

inventor of the Owens machine. As a boy of ten, in 1869, he joined the ranks of the thousands of children employed in the glass factories. He died in 1923, the genius of the glass industry, whose inventions contributed more than all other factors combined to the complete elimination of child labor from the industry.

Labor Conditions During the 1926 Apple Harvest in the Wenatchee Valley

By Louise F. Shields

A RECORD-BREAKING crop and record-breaking labor difficulties were the 1926 portion of Wenatchee, Wash., the apple capital of the world.

Four counties comprise the Wenatchee apple empire—Chelan, Okanogan, Douglas, and Grant; their population centers are at Wenatchee, Cashmere, Leavenworth, Chelan, Pateros, and Okanogan.

Apple growers and shippers rejoiced at the beginning of the harvest, in the prospect of realizing seventeen to twenty million dollars from their 1926 orchard investment. Within a few days after apple picking started there was a full crew for the demands of the early varieties, the forerunners of the 13,608,000 boxfuls for shipment in 18,000 carloads, in addition to the apples used locally or in the cider, vinegar, or dehydrating plants.

On the basis of 75 boxes a day for the average adult apple picker, one and one-fourth sorters to one picker, and 200 boxes a day to a packer, there were nearly 8,000 unskilled and semiskilled workers needed for each of the 60 days of harvest; with the following division of labor:

	Days of work
Pickers	181,440
Sorters	226,800
Packers	68,040
Total	476,280

Almost a half million days of work according to this estimate, for the shipped fruit, would be greatly increased by counting the time for the unestimated amount of apples handled but not shipped in boxes. Many of the ranches had a labor turnover of 50 to 70 per cent every five or six days. That would bring the number of individual unskilled or semiskilled workers to at least 60,000 for the period of the 60-day harvest. In addition to these there were many box makers, nailers, handlers, and truckers, who were transients, as were the groups enumerated.

The resident, year-round farm help was kept employed at its steady jobs, or given responsibility for foremanship in orchards, packing houses, or warehouses. The surplus of town residents was absorbed largely as extra clerical help in offices of shipping companies.

The season's early era of good feeling was eclipsed by a scare which spread through the valley that the big crop might never reach the market. Federal inspectors announced strict enforcement of the order to reject apples carrying a heavy residue of arsenate of lead, used as a spray to combat insect pests.

Some of the growers were unaffected by this announcement because they had followed the early suggestion of the United States Bureau of Chemistry to cease spraying after a certain date; their apples were clean. Others immediately installed felt flaps over the apple-grader runways of their packing houses, and thus wiped away the offending chemical.

But many insisted that no injury could result to the consumer from the spray which the producer was handling without serious effects, and protested against Government interference with legitimate business, declaring they would let the apples rot on the trees. Certain newspapers in the Pacific Northwest echoed their attitude and caused many prospective harvesters who were on their way to Wenatchee to turn back and seek work elsewhere.

The growers found, however, that they would have to conform with the Federal order, and began to install the felt wiper apparatus, or in case their acreage was small, to arrange for hand wiping by additional workers.

Efforts to Obtain Workers

ABOUT this time, the first week in October, a frost unusually heavy for this date occurred. The president of the Wenatchee District Cooperative Association sent a letter to all of the members, urging them to rush the harvest, since the frost would result in the apples falling within 10 days. The members disregarded his warning, however, and went ahead with preparations for putting on their maximum crew at the usual period, later in the month.

In the meantime, the Pacific Northwest representative of the United States Employment Service had cooperated with the county commissioners in organizing a temporary branch of the service at Wenatchee, the county seat, for handling apple-harvest labor. He stated his readiness to supply additional workers if desired and asked for notification of any emergency need. The Episcopal minister at Cashmere, with a commendable public spirit, opened a free employment office in the parish house of his church.

Within 10 days after the frost word came from all parts of the valley that fruit was falling and would be worthless except for use in the cider press, vinegar factory, or dehydrator. Only the apples on the trees would bring the top-market price on which Wenatchee based its estimate of income. And there must be workers at once to gather those apples before they should fall.

The temporary United States employment office at Wenatchee was stampeded by orchardists bidding against each other for the few workers registered. But no one sent word to the main northwest office. Instead, wires went to newspapers in Seattle, Tacoma, Everett, Spokane, and other cities that there was an emergency demand for apple pickers at Wenatchee, and the first intimation the main office received that there was a labor shortage came through the Spokane newspapers.

The newspaper notices were supplemented by the effort of individual growers to enlist workers through public and private employment agencies and personal friends in many cities. A call went out for 1,000 people to leave their usual occupations in Wenatchee and go out to salvage the fruit which meant the livelihood for merchant,

doctor, and lawyer as well as rancher in that locality where 4,500 acres of orchards were condensed within a 10-mile radius of the city. The school authorities closed the high school and released 1,000 boys and girls for the orchards and sorting tables. Stores and offices released 150 clerks.

Stampede of Labor to the Valley

SOON every train and stage brought job seekers. Automobiles, old and new, crowded every highway leading into the apple capital. Hotels and rooming houses overflowed. Lines formed at the cafés. Auto campers lined the roads and the outskirts of the settlements. The United States employment office buzzed with applicants, efficient or worthless.

Along with the hordes of industrious workers who were asked to come, traveled the riffraff of the cities. The sawdust dumps of lumber mills and shingle mills became human ant hills at night. Early callers witnessed the men, women, and children creeping from the dumps into which they had burrowed to escape the night frosts of that mountainous region.

Across the railroad tracks from the substantial business section, bands of wobblies established their "jungles." They began to make their presence felt through a demand for higher wages and threats to the workers who accepted the rate of 4½ cents a box which prevailed at the beginning of the season, or even the 5 or 6 cents which some of the growers were beginning to offer in their excited demand for harvesters to save their crops. Complaint by the growers caused the Wenatchee police to swoop down upon their camps one evening, where they rounded up 50 or 60 floaters, and offered them a choice between going to work or leaving the community. A number consented to accept jobs. Some who refused to go to work were penniless and were thrown into the city jail on the charge of vagrancy. Others had money and were taken to the railway station and were forced to buy tickets and to leave on the next train.

But the wage scale did not stop climbing with the breaking-up of the "jungle gang." Growers and packing companies which had contracted for certain acreages began to outbid each other for workers. Up went the scale, until one company topped the market with its offer of 8 cents a box. On the average, the orchardists must have paid 30 to 70 per cent more than usual for their apple-harvest labor.

Need of Organized Employment System

AFTER the emergency was over, the more thoughtful of the Wenatchee residents declared that the order from the United States Bureau of Chemistry had been a blessing in disguise, in that it had put the growers on their mettle to insure their apples reaching the consumer in the best of condition. They said, also, that the 1926 crisis had startled them into preparation for the 1927 harvest.

The leading citizens are creating sentiment to induce the growers to place their orders for help with the employment office, instead of hiring, regardless of efficiency, the first applicants who drive up to the gate. These citizens have found one of the reasons for labor turnover to be the fact that the orchardists did not live up to their

contracts with their workers as strictly as the manager of an industrial plant would be compelled to do in dealing with organized labor; another is that the orchardists did not regard their agreement with the employment office as binding.

The two following illustrations of these facts are typical of hundreds: Six pickers offered, through the employment office, jobs at the rate of 5 cents a box and three sorters offered 5 cents a box found the positions filled, and received abusive treatment from the ranch foreman. Three sorters drove in their own car to a ranch 60 miles distant, after receiving the United States employment cards in personal conference with the ranch owner. At the end of the 60-mile drive they presented their cards. The foreman told them he had no jobs open and would assume no responsibility for the ranch owner's placement of the order. The applicants demanded satisfaction through an appeal to the county agricultural agent. The boss then offered to compromise, and paid the automobile expense and wages at the rate of $3 a day for the three of them, a total of $15.50.

Students of the economic situation in the Wenatchee district are endeavoring to find a practicable method for requiring the filled jobs to be reported to the employment office. A return postcard is accurate but slow. A telephone message is speedy but likely to be overlooked by both employer and workers because of their emergency absorption. Employment experts in certain agricultural sections are requiring a cash deposit from the worker for a location on the ranch camp grounds, this deposit to be refunded after a certain length of employment. This deposit would remind the worker to report in order to receive his refund.

Another solution suggested is a deposit by the employer which would be refunded at the end of the season, provided his reports had been satisfactory. This might also serve as a check on the dishonest practice, prevalent in many agricultural sections, of an employer luring to his own service workers sent out to another ranch, frequently by an offer of a higher wage. A season or two of the deposit system might weed out the really dishonest from the thoughtless among the farmers.

Another condition affecting the labor situation in Wenatchee Valley is the shortage of camp accommodations. Many of the growers are said to cling to the belief, true 10 or 15 years ago, that they need not provide living quarters because they can obtain workers living in the valley and sleeping at home. The most conservative observers now admit that 75 per cent of the packing and 90 per cent of the picking is done by transients. The less conservative say 99 per cent of both. Some of these transients have homes 50 or 60 miles distant in the upland country and come after finishing their own wheat cutting and threshing. But they come too far to return home at night. A large proportion of the harvesters are of the type described earlier in this article, and are entirely destitute of living accommodations except their own camping outfits or some provision by the employer.

One large corporation provides an apartment house and good board at a moderate price. That company usually has a surplus of workers. A few ranchers furnish cabins or tents, but many of them declare they can not afford to reserve from their valuable apple-bearing land even sufficient space for workers to pitch their own tents.

Need of Organization in Marketing

THE president of the Wenatchee District Cooperative Association states that the greatest difficulty about the apple-harvest labor is in the wage scale. He insists that the farmer will never come into his own until he can command a price for his produce which will justify his paying wages equivalent to those of industrial plants, and that it is futile to expect efficient labor in agriculture at $3 or $4 a day when the workers worth having can obtain $5 to $10 a day in industry. He states:

> Back of the low wage scale is the farmer's poor opinion of himself and his job. I get sore because our State agricultural colleges teach everything about production and little or nothing about marketing or the farmer's relationship to the general scheme of things. If our farmers could appreciate their importance in the social fabric they would lose their inferiority complex. Many of our orchardists consider themselves obliged to accept dictation on every subject, even their selection of a certain kind of tractor, from the banker or the shipping company which advances money, often as much as 50 per cent on the crop at blossom time. They scarcely know their souls are their own. It is only when they organize into some such cooperative movement as ours that they begin to feel their independence. The orchardists who call themselves "independents" usually do not deserve the term so much as the men who are in the organization. We are now trying to secure cooperation of all the Pacific Northwest apple organizations under the title "Northwest Boxed Apples (Inc.)." But this is only one step in the right direction.
>
> There is an enormous amount of false reasoning about food production. If the farmer produces more than he can sell at a profit the public accuses him of hoarding because of his refusal to sell at a low market price. I maintain that a farmer has no moral obligation to produce and sell at a loss any more than a logging company is morally reprehensible if it lets stumps rot in the ground rather than convert them into paper pulp at a loss, nor any more than a banker who declines to lend money at a rate which would not cover the bank's overhead expense.
>
> I have risked making myself unpopular by refusing the sale of C-grade apples when that would lower the demand for A and B grades. Many of our growers can see only as far as the immediate cash returns from those C-grade apples and fail to realize that they would glut the market and would advertise our valley as producing inferior fruit.
>
> Some day the State colleges will wake up to the fact that they should teach the farmer self-respect. Then they will teach him to market his crops at prices commensurate with shoes and automobiles. At present the dealer and the transportation company regard themselves as the farmers' overlords, possessed of divine right to dictate prices to both producer and consumer. I hope to live to see the day when the farmers, through cooperative organizations, shall determine the approximate need for certain commodities and then regulate their planting by the amount which can be sold at a reasonable profit. The farmers must shake off their inferiority complex.

Students of labor movements will watch with interest the outcome of Wenatchee's effort to solve the harvest labor problem in 1927. The description given in the foregoing paragraphs is not a criticism of that district. The orchardists of the Wenatchee Valley are not different from all other Americans. As a matter of fact they include many of the finest-spirited and most progressive citizens of the United States. These orchardists, however, are victims of an inadequate system of agricultural labor distribution which can scarcely be improved without an increased interstate movement of migratory workers through the United States Employment Service. And they are the victims of an antiquated system of farm-produce marketing—a system just emerging from the stone age as compared with the marketing of factory products.

Given adequate help, that group of men in the Wenatchee Valley is prepared to make a demonstration of intelligence and effectiveness in handling their harvest labor situation.

Passage of Longshoremen's Compensation Act

BY ACT of the recent Congress, compensation for injuries to longshoremen and other harbor workers while working on board vessels in harbor has been secured after efforts extending over more than 10 years. Up to this time such workers, numbering several hundred thousand in total, have been in a very anomalous position. A longshoreman if injured on the dock received the benefits of the State compensation law, but if injured on the boat or in connection therewith his only redress was to sue under the so-called admiralty law, or under the common law where that law was competent to give a remedy, with consequent delay and uncertainty. Earlier attempts to remedy this situation were made by Congress in 1917 and 1922 by amending the Judicial Code so as to confer the benefits of the local State compensation act in any given case to a harbor worker injured on a vessel, but both of these attempts were declared unconstitutional by the courts.

The new act (approved March 4, 1927) covers harbor workers of all kinds, other than the master or members of the crew. It thus applies primarily to longshoremen, engaged in loading and unloading vessels, but also to more than a score of crafts or trades—such as plumbers, painters, upholsterers—whose work is called for on an extensive scale in modern vessels.

While the enactment of this statute must be regarded as a most desirable achievement, much regret is felt in some quarters over the failure to make the act cover the entire job of loading and unloading, with its constant fluctuation of status from State to maritime coverage, and the difficulty of determining just at what point the change takes place. The power of Congress to regulate commerce is undoubtedly available to make legislation covering the transactions on the dock and the bridge no less certainly than its control over maritime affairs authorized the enactment of the statute in its existing terms.

Lack of appropriation for enforcement

THE new statute, intended to care for all the classes of workers named above, is by its terms to become effective as an exclusive remedy on July 1, 1927, action in admiralty and at common law for injuries to such employees being abolished after that date. Unfortunately, in the rush of the closing hours during which the enactment was completed, no provision was made for appropriations for the administration of the act. Not only are suits thus abrogated, but no stevedoring company may make a contract to render service for loading or unloading any vessel after July 1, without a certificate from the deputy commissioner of his district. Doubtless a way out will be found, but that an emergency confronts the United States Employees' Compensation Commission, charged with the general administration of the act, is too evident for further comment.

Coverage of the Act

THE act includes injuries "occurring upon the navigable waters of the United States (including any dry dock)," the purpose being to cover cases in which "workmen's compensation proceedings

may not validly be provided by State law." In other words, it is intended to meet State laws at the point where they cease to function on account of maritime or admiralty jurisdiction, and care for the much-buffeted and vaguely defined maritime worker other than the crews of vessels. Definitely excluded are "a master or member of a crew of any vessel, or any person engaged by the master to load or unload any small vessel under 18 tons net." Not only accidental injuries and death due thereto are included, but also occupational diseases and infections arising naturally out of the employment or naturally or unavoidably resulting from accidental injury. Injuries caused by the willful act of a third person directed against an employee because of his employment are covered, but those due solely to the intoxication of the employee or his willful intention to injure or kill himself or another are excluded.

Seamen proper were omitted due to their own insistence as expressed through their organization.

Administrative Provisions

THE statute is compulsory in its application to employers and employees within its scope, and payments of the prescribed benefits must be secured by insurance or satisfactory proof of financial ability to make the required payments, followed by authorization from the administrative commission to pay such compensation directly. The liability under the act is exclusive, neither the injured workman nor his legal representative, next of kin, or anyone otherwise entitled being permitted to proceed in an action for damages unless the employer has failed to secure the payment of compensation as required by the act.

A waiting time of 7 days is prescribed, to be compensated for if disability lasts more than 49 days. The maximum weekly benefit is $25 and the minimum $8, or actual wages if less than $8. Medical, surgical, and other attendance and treatment, hospital services, medicine, and apparatus as the nature of the injury may require are to be supplied. Benefits for disability or death may not exceed in any one case the sum of $7,500. There is a schedule of benefits for permanent partial disability, with provision for extension if healing requires a longer period than the periods fixed in a separate provision of the act. Total disability is compensable during its continuance, and death benefits are payable until the remarriage of the spouse or the attainment of 18 years of age by children. The percentage of wages payable is 66⅔. It is obvious that cases of prolonged total disability and dependency may be affected by the maximum total allowance of $7,500.

The act is to be administered primarily by the United States Employees' Compensation Commission, but immediately by deputy commissioners who conduct hearings, make investigations, etc., and render conclusions, which are subject to review by proceedings in the appropriate Federal court. Deputy commissioners are to be appointed in accordance with the provisions of the civil service laws, the fixing of districts, the making of regulations, and general administrative proceedings being in the hands of the United States Employees' Compensation Commission.

Provision is made for reports of accidents and records of injury and death. The commission is authorized to make studies and investigations with respect to safety conditions and causes of injuries in the employments covered by the act, and is directed to make recommendations from time to time to Congress and to employers and insurance carriers as to the best means of preventing injuries. Access to places of employment is to be permitted for the purpose indicated.

The act carries standard provisions with regard to notice, filing, exemption of claims, procedure, third-party liability, etc. Rehabilitation is provided for, as well as second-injury benefits, funds therefor to be maintained by contributions of $1,000 each in case of death of an employee leaving no person entitled to benefits (one-half to each fund); fines and penalties also go to these funds.

Aliens receive the same benefits as residents, except that dependents in any foreign country are limited to the surviving wife or child or children or a dependent parent who has received support for the period of one year prior to the date of the injury.

It is of interest to note this action of Congress in regard to one of the groups of workers for which it must legislate if the principle of fixed compensation for industrial injuries is to be made general. Remaining are the seamen, interstate carriers by railroad, and private employees in the District of Columbia. Reference has already been made to the relation of seamen to this act; bills have been earnestly considered with regard to private employment in the District of Columbia, but without any very close approach to final action. A division of attitude among the labor organizations has kept in abeyance action in regard to railroad employees. In 1913 a measure passed the Senate, was amended in the House, and died in conference in the closing days of the Sixty-second Congress, since which date no approach has been made to the enactment of a law in this behalf, though bills have been introduced from time to time. The action of Congress in passing the longshoremen's bill, and also in making urgently needed amendments to the United States employees' compensation act, raises the hope that the other groups will be cared or without great delay.

INDUSTRIAL RELATIONS AND LABOR CONDITIONS

Report of German Trade-Unions on American Industrial Conditions

IN THE latter part of 1925 a German trade-union commission was organized to visit the United States for the purpose of studying the industrial organization in order to see whether and in what way American methods could be applied to German conditions. This commission was composed of 14 members representing the General German Federation of Labor (A. D. G. B.), a number of independent unions, and the German labor bank. The commission spent two months in the United States. Its report,[1] recently issued, is in four parts, dealing, respectively, with the economic organization of the United States, American social life, trade-unionism in the United States, and labor banks. Some of the findings of the commission are summarized below.

Reason for the Study

THE necessity for first-hand investigation of American conditions grew, to a large extent, out of the situation in which the workers found themselves. Ever since the World War, the American speed of production, American technique, and American worker's zeal have been used as conclusive arguments in discussions of economic policies. That the economic position of the United States during and after the war should awaken the ambition to achieve "American results" is natural enough. To attribute American production to the greater zeal and effort of American workers, however, would, in many ways, be disadvantageous to the German worker's bargaining power. In the absence of direct knowledge, the workers' representatives were unable to measure the accuracy of this current interpretation of American production.

The task of the investigating commission was twofold: (1) The immediate task of examining the American workers' alleged greater intensity of work as explanatory of the production results which stand to America's credit. In a sense, this was also the question of the contribution of Taylor methods to American production. (2) The broader task of ascertaining the real causes of the scale of American production, and of examining these causes with a view to their adaptibility to German conditions and their possible result upon the position of German labor.

Output per Worker in United States and Germany

THE commission defined a "worker's output" as "the quantity produced per man in a given working period and at a given bodily exertion." The quantitative measure of production, in terms of

[1] Amerikareise deutscher Gewerkschaftsführer. Berlin, Allgemeiner Deutscher Gewerkschaftsbund. 1926.

pieces, units of weight, or length was rejected, since extraneous conditions have a vital influence on the output of the individual laborer.[2]

As the result of its observation in factories and shops, the commission came to the conclusion that "the higher output of American industries and also the generally higher efficiency achieved by the American worker are not due to the greater physical intensity of work. * * * It is the difference in production methods which leads to difference in results."

In a number of industries no difference in intensity of work or in output as compared with Germany was discovered. In those industries in which differences in output were found, the differences were attributed by the commission, not to greater intensity of work on the part of the worker, but to natural conditions and the technical organization of the industry.

Industries in Which Output of American Worker Exceeds That of German Worker

The commission found that in certain of the building trades the output of the American worker exceeds that of the German worker. Thus, the output of the American mason working on a steel skeleton is greater than that of the German mason. The commission was of the opinion that this is due to the difference in working methods and in the task. The American mason is engaged merely in filling the steel structure, the outlines of his work being given; the German mason works without such help. Again, jobs such as the mixing of mortar and the getting of stones are performed by the German mason; in America they are attended to by special workers. In Germany much effort is wasted because of working at too low or too high a level; in America the movable scaffold permits an easy position and easier work. A similar contrast is found in the work of men engaged in building foundations. The pouring of concrete, customary in America, is a more rapid operation than the European method of stamping it; in America the combination of the concrete mixer with mechanical pouring devices capable of reaching the whole working place eliminates the wasteful carrying of the heavy mass to the forms. In other construction operations, the American worker does not exhaust himself in digging and shoveling but often merely corrects the heavy labor performed by machine. It is obvious, then, that the differences in output are due, in these cases, not to greater physical intensity of work but to greater specialization, the worker confining himself to his specific task and performing no "side" jobs, to greater use of machinery, especially for heavy work, and to the elimination of waste motion through the provision of mechanical equipment.

Industries in Which Output of German Worker Equals That of American Worker

In certain industries and plants the material conditions for work (material, machinery, etc.) do not differ from similar ones in Germany, and in these cases comparison may be made of the physical intensity of work. In the clothing industry, for example, the commission found the intensity of work to be the same in both countries. In this

[2] Such as nourishment of the worker, adaptation to the work, hygiene of shop, uniformity of product, quantity of production, quality of raw material, state of machinery, etc.

industry the intensity was pronounced by the commission to be greater than that observed at the mounting conveyors of the Ford plants. In both cases any increase of intensity was considered impossible by the commission. Interestingly enough, the commission found the cause of the great working pressure to be the lag of the mechanical organization of both the American and German clothing industries behind other industries. The sewing machine is not an efficient piece of machinery if judged by modern standards, sewing but one piece at a time and necessitating much human guidance. Increase of productivity has therefore been limited. Even the division of the making of a man's coat into 64 operations and the mechanization of individual processes (buttonhole making, cutting, etc.) have not been sufficient to offset the lack of technical advance in the sewing department of the industry.

Similar conclusions are reached as regards the furniture industry, machine shops, drafting, and other lines of work.

Industries in which mechanization has progressed equally far in America and in Germany reveal, then, no difference in the output per worker and no difference in exertion required on the part of labor.

Larger output is at times correlated with supervision. But the commission found that supervision plays by no means the rôle in the American shop customarily assigned to it. Rather, the shop organization and the production technique seem to make much supervision unnecessary. It is not meant that supervision does not exist in American industries; that there are no employers who make use of pace setters to induce greater speed on the part of the other workers; that the reaching of a set minimum output is never a condition for further employment or the payment of the minimum wage. These methods are used. But, in the commission's opinion, they are employed by the less efficient concerns, backward in equipment and technical organization. This fact supports the point of view maintained by the commission that the greater productivity can not be attributed to greater exertion, either voluntary or induced, on the part of the worker.

Speed of Machines

It remains to be seen whether and to what extent the worker can be driven to greater exertion by the machine. The commission holds that the speed of a machine can not be changed arbitrarily to induce greater physical effort on the part of the worker. The machine being only a part of the production process as a whole, its relation to that process can not be changed at will. "The speed of the machinery stands in a fixed relation to the degree of organization of the industry."

This consideration is all the more of interest to the delegation because the speed of American machinery is often assumed to be very high as compared with that of European machinery. But the commission concluded that where American speed is actually higher, it is the result of natural conditions. Thus, machinery designed to overcome distances, such as railroads, do often operate at higher than the European speed. One cause for this is the nature of the roadbed. Going pretty much in a straight line, over a long stretch of flat territory, with few stations in the thinly populated sections of the prairie States, the train can attain a high speed; that of the continental train

is decreased by frequent turns, frequent stops, and rapid alternation of mountains and flat country. Better roads and the use of these by automobile traffic almost exclusively make transportation by automobile easier than in Europe. As to the machines in factories, however, no difference of speed was observed in the case of machinery similar for both countries.

As a special mechanical device for inducing higher output on the part of the worker, the conveyor belt gives such different results that conclusion is difficult. In some cases the workers are obliged to exert themselves to the utmost, while in others much less effort is required and much less fatigue results. Maximum utilization of the worker's physical powers was noticed in the packing rooms of the mail-order houses and in the Chicago meat-packing plants. On the other hand, workers in a plant manufacturing boxes for radios pronounced European and American working speed to be similar (they had recently come from Germany where they had been employed on identical work).

The commission found that where the worker operates more than one machine in America the work is largely the supervision of machines so perfected as to perform the tasks almost automatically; comparison of American and German conditions thus became impossible.

Of the practice of requiring workers, even skilled workers, to perform all sorts of side jobs the commission found no trace. The tendency was rather to confine the worker to his main job with consequent good results in output.

Methods of wage payments were found to have no decisive influence on American rates of production and to offer no explanation for them. They were found to differ little, if any, from German methods used.

In sum, the commission found that American rates of output per worker can not be attributed to greater exertion on the part of the worker due to any of the following:

(*a*) Personal greater effort.
(*b*) Supervision.
(*c*) Acceleration of machinery.
(*d*) Use of special machinery (such as the conveyor belt).
(*e*) Attendance of several machines by one worker.
(*f*) Performance of "side" jobs in addition to main job.
(*g*) Method of wage payment.

Technical Organization the Vital Factor

The Taylor method has been suggested as the solution of the problem of increasing the output per worker. But this method has undergone considerable modification. The worker no longer holds the central position in the consideration of the problem of output. Plant organization is now emphasized as the important factor. The difference between the two methods of approach becomes evident from the mere enumeration of the items which must be considered in the latter. In addition to the usual questions of raw materials, equipment, and labor force, arise those of costs of management, transportation of raw material within the factory, selling organization, warehousing, and length of time required for the turnover of capital

(from time of producing the goods to the time of its sale to the ultimate consumer). Characteristic of the new attempt to achieve optimum results, in contrast to the older attempt to achieve maximum results, is the effort to produce as much as possible with the least possible materials and labor. Two ways are open, by no means mutually exclusive; the one way is the way of technical advance, the other that of well-developed organization.

The commission found in the American plants visited less strange machinery than it had expected. Although differences exist, the report emphasizes that differences in mechanical equipment do not develop accidentally. "There must be definite tasks before the need, and, with it, the possibility of solution can develop." "Machines then are a consequence, not a cause, and as such they demand other causal conditions." Neither as a means of increasing the worker's effort nor as a means for increasing production without greater effort on the part of the worker do machines give an explanation for the high production rate per worker in the United States.

The technical organization as illustrated in the automobile industry is achieved largely by means of two mechanical devices—the conveyor belt and the mounting conveyor. The conveyor belt is the means not only of bringing to the worker the materials for his work but of insuring a continuous "flowing production." The underlying reason for such a development is of course the infinite subdivision of jobs, and the adaptation of machinery to the performance of the single small operations. The mounting conveyor, fulfilling a different function, is used in the assembling of the finished parts. It, too, depends upon extensive specialization of the jobs. In both cases, complete analysis and integration of the production process is necessary. In both cases the chief function of the belt is not speeding up, but elimination of waste and the cutting down of production costs. The effecting of savings by the elimination of costs is not confined to the actual producing costs but is extended to all costs bound up with the rate of turnover of the necessary capital. And here the contrast becomes clear between the German method of decreasing costs by reducing the pay roll, and the American method of decreasing costs by reducing expenditures as a whole.

Rate of Production in the Two Countries

A HIGH rate of production is made possible by mass production, and this in turn depends upon uniformity in commodities produced and a high purchasing power on the part of the consumer.

As regards uniformity of commodities, the commission found that standardization in America has not progressed to the extent generally assumed in Europe. As many as 54 types of marketable automobiles are manufactured, for instance, and Ford himself has as many as seven makes. Uniformity must then be sought not so much in the finished products as in the elements which make up the finished goods.

Since the purchasing power of the workers is derived almost exclusively from their wages, the commission studied wage incomes in the United States for the purpose of comparing the worker's purchasing power here and in Germany, and so of obtaining an explanation of the scale of production for which it had already found the technical explanation.

Comparison of Money Wages in United States and Germany

A COMPARISON of wages paid in a number of American occupations with wages paid in similar occupations in Germany cast light upon the general statement that wages are higher in the United States than in European countries. The comparison was made for selected trades, taking, for the United States, the union scale paid in 19 cities and the average wages paid in individual industries in September, 1924, and for Germany, the highest union rate paid, in the corresponding occupations, in the whole of Germany.

The comparison was made, first, for skilled and strongly organized trades. The union minimum wages correspond, for these groups, with the average wage rate in the locality, so that the wage chosen was representative. To illustrate: Printers' minimum wages in the United States amount, at their best (New York), to five times the highest wage paid to printers in Germany; at their worst (Philadelphia), they are equal to four times the German maximum wage. Similar comparisons were made for seven trades: Printers, electricians, carpenters and joiners, masons, masons' helpers, painters, and mortar carriers. Union minimum wages in the United States are found to be, on the average, more than four times as high as the maximum union rates paid in Germany.

Comparison was next made for 25 trades and industries not so strongly unionized. The metal workers' hourly union rate fluctuated, in the large number of towns visited by the commission, between $0.90 and $1.10 per hour, the Detroit rate being still higher. Comparison with the hourly wages of the German metal workers (0.90 mark [3]) shows that the American rate is four times as great as the German rate. But because of the smaller degree of unionization among the metal workers, the union rate is not the average local rate. When checked against the wages actually paid in the industry as a whole, the ratio between the American and German wages is somewhat less. In this group of industries the commission found that the difference between the average wages actually paid and the union scale was much greater than, for instance, was the case in the building and printing trades where the effect of the union wage is felt by a much greater proportion of all those employed in the trade. Nevertheless, even in the less organized industries, average wages were still several times larger than the German top wages in these same industries [4] (women's wages in the automobile industry three times as large, cotton textile industry three to three and one-half times as large, etc.).

The unskilled and almost wholly unorganized groups examined by the commission included the railroad day laborers, the workers in the petroleum industry, and those in the canning factories. The railroad day laborers earn less than $3 a day, and the wages of the unskilled workers in the oil refineries and in the canning factories are lower still. For the last two categories no statistical data are given in the report; the commission's conclusions are the result of

[3] Mark at par=23.8 cents.

[4] Comparison was made with the nominal German union rates. An additional 12 per cent over and above the union rates is assumed to cover all possible higher payments in the German trades. These corrected wages were compared with the wages given by the National Industrial Conference Board. Allowance was made for the fact that the noninclusion of overtime and piecework rates depress the figures, while noninclusion of home work and wages in small or badly paying shops raise the figures unduly.

observation. But even these wages are several times higher than the German wages in these same occupations.

In general the commission concluded that "wherever our travels led us, * * * however different the industries studied were, [the prevailing impression was] that not only do the skilled workers earn four times as much, and more, than the corresponding German workers, but that this relation between wages obtains also for a large portion of unskilled workers."[5]

Comparison of Cost of Living and Real Wages

CONSIDERATION of wages by themselves and their comparison with wages in other countries do not permit sufficient insight into the workers' position. Wages acquire real meaning only in their relation to prices and their interpretation in terms of the workers' purchasing power. A comparison of the real wages in the two countries is, however, impossible without some preliminary qualifications. The consumption which constitutes the American and German minimum existence standards is different for the two countries. The use of the prices of potatoes and of rye bread, staple articles in the German case, is meaningless for a comparison of the German and American budgets, since rye bread is more expensive in the United States and potatoes are much less important in the worker's budget. In the same way the foods consumed by the American laborer's family give no basis for comparing the two budgets. The method adopted by the commission was to take the price, in Milwaukee, of individual commodities and to calculate the number of hours of an unskilled laborer's work which would be required for their purchase. The commodities considered include articles of clothing, rents (rooms and flats), coal, and board per week (dinner only) in an average restaurant. The average amount of taxes paid by the worker living on the standard in question was added.

Comparison of prices resulted in two conclusions: First, that "for clothing and food the absolute prices are scarcely higher and in part lower [in the United States than in Germany]"; second, that for other items—housing, heat, etc.—the American prices are above the German ones. The main difference lies in the fact that the American worker can, for his higher wage, buy more than the German worker of like category. If compared on a monetary basis only, the price of a three-room flat is lower in Germany than in the United States. But the German worker of the best-paid group, were he to rent this flat, would have to spend on it half or two-thirds of his income, while the American skilled worker would pay a much smaller—and more easily payable—portion of his earnings.

In order to arrive at an evaluation of the relative positions, as consumers, of the American and German worker, the commission also compared the American and German estimates of the portion of earnings absorbed by the various components of the existence minimum standard. The bases of estimates are, for America, a

[5] No attempt was made to compare earnings of workers in very low-paid occupations, because of the absence of statistical material and the difficulty of even determining the occupation of that portion of the working population. Lack of statistical information for other sections of the country and for certain trades restricted the conclusions reached in the main to the industrial centers of the Northeast and to the occupations influenced directly or indirectly by unionization.

yearly income of $1,100 (regarded as an "existence minimum"), and the "existence minimum" for Germany (figures not given). The estimates are as follows:

ESTIMATED PROPORTION SPENT FOR SPECIFIED ITEMS OF BUDGET IN GERMANY AND IN AMERICA

Item		American estimate for America	German estimate for Germany
Food	per cent	40	54.77
Clothing	do	18	10.05
Housing	do	19	20.35
Heat and light	do	6	5.55
Miscellaneous	do	17	9.28

If we remember that the American wage is much higher than the German wage and that not much difference exists between the American and German prices of food, it becomes clear that the American standard of living is higher; that food consumption can be larger and the food better; that consumption of commodities other than food can also be greater, especially since the higher prices of these other commodities are more than compensated in America by the higher income.

But are the wages of American labor at or above the "existence minimum level"? A tabulation of average hourly and weekly wages for 23 industries, given in the report, contains a calculation of these wages as yearly wages, the year being taken as full 52 weeks. Under these most favorable conditions only two industries of the list fail to provide their workers with at least $1,100; six industries exceed $1,100 by $250 or less; and four reach the "health and decency level" of $1,600–$1,700.

Observation and statistics—of wages, way of life, and cost of living—led the commission to the conclusion that: First, nominal wages for skilled labor and for much of the unskilled labor are from two to five times as high as German wages, the higher and more uniform wages obtaining mostly in industries which are unionized or which benefit indirectly from unionization; second, average real wages are about two and a half times as high as average real wages in Germany.

"These higher real wages," the commission concludes, "are not to be looked upon as the result of high production. The contrary is the case. * * * The opening up of the national market by the creation of high purchasing power among the mass of the population is the secret of American industry. * * * Out of this practice the marvels of technique and the organization of work grew almost spontaneously."

Productivity of Employees of Government Printing Office

THE annual report of the Public Printer upon the work of the United States Government Printing Office for the year 1926 gives some interesting data regarding the increased output per employee during the past few years. The report states that in the last six years the efficiency of employees has increased and the

improvement of equipment has been greater than during any similar period of the history of the office. The value of the product for the six-year period, 1921–1926, was computed at $66,181,939, as compared with $58,161,481 for the six years 1915–1920, the greatest production record up to that time, including, as it did, the vast amount of extra work required during the World War. This increase of more than $8,000,000 in the product was made with an average of 340 fewer employees than were on the rolls during the six years 1915–1920. Further evidence of the greater efficiency of the employees during the last six years is furnished by the record of the typesetting-machine operators, whose hourly production averages increased from 3,782 ems for linotype operators and 4,835 ems for monotype keyboard operators in 1921 to 4,559 and 6,265 ems, respectively, for the fiscal year ended June 30, 1926. For the last six months of 1926 the linotype average was 4,802 ems per hour and the monotype average 7,998 ems per hour.

The largest gain of the year was in composition, with a total of 2,158,890,100 ems of type set by the printing division. This was an increase of 30,495,400 ems over the preceding year, which in turn had added 83,729,800 to the total set in 1924. The greater composition for 1926 was accomplished with 140 fewer employees on the rolls and 1,328 less hours of overtime work in the linotype and monotype sections than during the year 1925. The apprentices alone set 87,416,700 ems of type during the year.

Except for the apprentice section and the small amount of composition by the hand and job sections, machines were used to set this enormous quantity of type. The report estimates that a force of 1,200 compositors would be required to set by hand the quantity of type produced annually by the 377 machines in the Government Printing Office.

The linotype operators attained an average of 4,559 ems per hour for the fiscal year, an increase of 388 ems per hour over their 1925 average and 854 ems per hour more than the average for the five years 1916–1920. The monotype keyboard operators increased their average to 6,265 ems per hour for the year, a gain of 493 ems per hour over the 1925 average and 1,419 ems per hour more than the average for the five years 1916–1920.

Since a detailed system was adopted a year ago for recording and reporting the work of the monotype casting machines, the production of that section has increased considerably. The units cast per hour from November, 1925, to April, 1926, averaged 3,852, while from July to December, 1926, the average increased to 4,320 units cast per hour. The percentage of production hours was 54, which compares favorably with casting machines in commercial printing plants.

Collection of Wage Claims by Colorado Bureau of Labor Statistics [1]

IN the biennium 1925–1926 the work of the Colorado Bureau of Labor Statistics in connection with the collection of wage claims substantially increased. While there is actually no legal authority for such activity by that bureau, the very nature of these claims,

[1] Colorado. Bureau of Labor Statistics. Twentieth biennial report, 1925–1926. Denver, 1926. pp. 20–24.

and the almost helpless condition of those who apply for assistance in such matters prompts that office to do all that is possible to secure for the claimants the payment of wages rightfully due them.

Recourse must be had to moral suasion and it is felt that a great deal of the success of the bureau's work in this connection results from the fact that courtesy and diplomacy are uniformly practiced by the office. The majority of the cases arise from misunderstandings over rates of pay and conditions of employment. In other instances the workers have not insisted upon periodic settlements, allowing their accounts to run for a long time. Other employees leave their jobs before the full time for which they were engaged has elapsed, and still other employees are presented with bad or "short" checks. Between 15 and 20 per cent of the wage claims handled are in behalf of women and in most instances the amounts involved are so small that even the spending of carfare to collect such claims in person is a burden. Among the woman claimants are domestic servants and nurses.

The lack of legal or statutory power has again, as in every other past biennial period, greatly hampered us in our dealings with employers who owe workmen wages. This lack of power or authority has also in very many instances put us in a bad light with claimants who seem to be obsessed with the idea that "labor must be paid," hence the labor commissioner should go right out and secure the money, forgetting all about the justice or injustice of the claim. The consequence is, that no matter how right the claimant may be, and no matter how wrong the defendant may be, and no matter how promptly the labor department decides that the money is owing and should be paid, there is nothing that can be done by this department to enforce such a decision.

Notwithstanding this serious limitation and the general difficulties which inevitably surround every claim presented, the department during the past two years secured the payment or settlement of more than half the claims presented at the counter in person and those sent to us by mail.

Every case is promptly handled. Whenever possible a personal representative of the office is sent to investigate and to secure immediate payment if this can be accomplished. In the majority of cases, however, a final settlement is not effected through personal contact until a large number of trips are made.

This work is done without charge. "It is probably a conservative estimate to state that claimants have during the last two years, saved from $10,000 to $15,000 by the free work of the department of labor."

The 1,163 claims collected for the biennium 1925–1926 aggregated $41,903.68 and averaged $36 per claim. "This indicates clearly that it is the worker with the small amount due him for his work who is really the one who needs the aid of the State, and is a strong argument for the adoption of a law setting up a small claims court. It is believed that almost every one of the 1,000 unsettled claims (filed in the same biennium) could have been adjusted by such a tribunal."

The report contains a draft of such a law and commends it to the careful consideration of the State legislature.

MINIMUM WAGE

Recent Decisions Relative to the Minimum Wage

THE minimum wage law of the State of Arkansas (No. 191, Acts of 1915) was applicable to female workers of all ages. It fixed an absolute statutory minimum of $1.25 per day for all female workers with six months' practical experience, and $1 per day for inexperienced workers. In a case recently before the Supreme Court on appeal from the District Court of the United States for the Eastern District of Arkansas, this statute was declared unconstitutional without written opinion, sustaining the judgment of the court below to the same effect, Mr. Justice Brandeis dissenting. The case was entitled Donham *v.* West-Nelson Manufacturing Co. (1927) (47 Sup. Ct. 343).

The company named was engaged in the manufacture of overalls, jumpers, shirts, and other work clothing, and was prosecuted for violation of the act. From a decision holding the act unconstitutional, W. H. Donham, as prosecuting attorney for the sixth judicial circuit of the State of Arkansas, brought this appeal to the Supreme Court, where the judgment was affirmed on the authority of Adkins *v.* Children's Hospital (261 U. S. 525, 43 Sup. Ct. 394), in which an act of Congress applicable to the District of Columbia was held unconstitutional; and Murphy *v.* Sardell (269 U. S. 530, 46 Sup. Ct. 22), which decided adversely the constitutionality of the Arizona law. It may be noted that the law applicable to the District of Columbia created a wage board for the fixing of minimum rates, while that of Arizona resembled the Arkansas statute in having a statutory standard.

An interesting contrast to these decisions is the action of the appeal court at Victoria, British Columbia, on December 2, 1926, sustaining the male minimum wage act of that Province. (Rex *v.* Robertson & Hackett Sawmills (Ltd.), Canada Labor Gazette, January, 1927, p. 120.) This act, as the title indicates, extends the principle of the minimum wage to male workers, a prior enactment having applied the principle to females. The administrative board had fixed rates for the lumber industry and the employer here objected that the board had no power to fix rates for industries, but for occupations throughout the Province, as for instance engineers, blacksmiths, etc., regardless of the industry in which employed. The court held that in its opinion the act "contemplates successive orders and admits of the fixing of minimum wages for all employees engaged in occupations connected with particular industries. It would be difficult otherwise to give effect to the peculiar circumstance of separate employers contemplated by the act."

Minimum Wage Developments in Massachusetts

THE Minimum Wage Commission of Massachusetts continues its activities, reaching out to the new industries of boot and shoe cutstock and findings, and electrical machinery and supplies, for which boards are to be appointed.

This action is taken contemporaneously with the coming into effect of the decree relative to toys, games, and sporting-goods occupation, effective March 1, 1927; while the decree relative to jewelry and related lines became effective January 1st of the present year.

Another line of action in which the commission recently has engaged is the publication of a number of firms for noncompliance. It may be recalled that a few years ago the Boston Transcript refused to accept for publication the list of names of noncomplying employers furnished it by the commission, and an effort was made to secure an order of the court compelling such action, such provision having been attempted in the statute. The court held this provision unconstitutional, but the commission has found no difficulty in securing the desired publicity for its lists of recalcitrant employers, four Boston papers of wide circulation having published during the early months of this year thus far notices of 38 such firms. Of these 26 were laundries in 7 localities and 5 were paper box manufacturers in 5 localities. Two were manufacturers of druggists' preparations, proprietary medicines, and chemical compounds; one each in canning, preserving, and minor lines of confectionery, men's furnishings, and women's clothing; two candy firms were also given publicity in December.

This method of inducement stands out in marked contrast in the way of such activities as above noted with the repeated accounts that come to hand of the practical elimination of the compulsory laws.

INDUSTRIAL ACCIDENTS AND HYGIENE

Sick Leave with Pay for Factory Workers

A STUDY by the Bureau of Labor Statistics of the various personnel activities carried on by industrial establishments, the field work of which was finished in the summer of 1926, included the collection of information as to the extent to which sick leave with pay is granted to factory workers or other workers on hourly rates of pay.

While sick leave with pay is quite generally granted to office workers and often very generous provision is made in cases of protracted illness, it is not usual to pay other workers during incapacity because of sickness. In a large number of establishments provision is made through the benefit association, or in connection with the group insurance plan, for payment for sickness and nonindustrial accidents, and the details of the various industrial insurance features which are either paid entirely or are materially assisted by the employer will form a separate section of the completed report. In a number of cases, however, firms were found to have a definite plan covering allowances for sickness which was independent of the insurance or benefit plans.

Quite a number of employers report that cases are treated on their merits and that liberal compensation is paid in certain cases, but there were 14 companies which reported that a definite policy was followed in providing payment in case of sickness. These included 7 manufacturing companies, 5 public utilities, 1 building management company, and a marble quarry. The latter company grants sick leave with pay to employees after three years' service, the proportion of the wages paid varying from 35 to 50 per cent according to length of service, with a maximum of $15 per week. The length of time for which payments are made was not reported.

A building management company on the west coast allows six weeks' wages during the year to all employees, to begin after the third day of sickness. An establishment manufacturing pharmaceutical supplies pays average earnings for 200 hours after five years' service. A company manufacturing electrical supplies will grant sick leave to piece or hourly workers in meritorious cases, but the payments may not exceed $100 in any 12-month period, and a large meat-packing plant gives employees with from 2 to 15 years' service one-fourth of their wages for four weeks, during which period they are carried on the plant pay roll; for the next 12 weeks the payments are made by the social service division, and after that if the case is meritorious it is referred to members of the company. After 15 years' service sick employees of this company are kept on half pay and in the case of employees who have been with the company 20 years or over full pay is given for an indefinite period.

A company manufacturing straw hats gives one-half pay for four weeks after the first week's sickness and one-third pay for four weeks longer after 5 years' employment; 10 weeks' pay at the same rate after 10 years' service; and one-half pay for 10 months after 30 years' service.

A canning company in the Middle West which has a very progressive policy of industrial relations, and in which all regular employees are on a salary basis, pays the salaries of all sick and injured employees in full until the employees' sickness committee or the nurse reports them able to return to work. In the case of chronic illness, full salary is paid for 8 weeks, half pay for 4 weeks, and quarter pay for another 4 weeks.

One company with many properties in different sections of the country has a general plan of annuities and benefits which is maintained entirely by the company. The company pays for sickness and accidents not incurred in the line of duty one-half wages, varying from six weeks after one year's service to 52 weeks for employees whose term of service has been 10 years and over.

A machine shop in the South with a large number of colored employees pays for cases of sickness and injury of its employees which are not covered by the workmen's compensation law. Payments are made upon recommendation of the plant physician or of a physician approved by the company, amounting to half the wages with a maximum of $1.35 per day. The payments begin after six days and may not exceed 90 days for one illness or more than 180 days in any calendar year. It is required that employees receiving these payments obtain proper medical and surgical attention.

A number of the companies providing electric light and power in different sections of the country pay their hourly rated employees during absence from work because of sickness, the usual rate being half pay and the period varying according to the length of service. One of these companies pays 10 per cent of annual earnings to employees in the service of the company one year and less than two years, the amount paid increasing to 65 per cent of yearly earnings after 12 years' employment with the company. If an employee has received from the company during any 12 months' period 65 per cent of his annual salary while absent from work on account of illness, his case may be referred to the pension committee for investigation and recommendation to the president of the company.

A general plan of sickness disability benefits covers the operations of another public utility company in its different branches throughout the country. According to the provisions of the plan payments are made after two years' employment. The payments are based on the employee's rate of pay, exclusive of overtime, at the time the disability began and amount to full pay for 4 weeks and half pay for 9 weeks if the term of employment has been 2 to 5 years; full pay for 13 weeks and half pay for 13 weeks for employment of 5 to 10 years; and full pay for 13 weeks and half pay for 39 weeks if the term of employment has been 10 years and over.

Health Conditions Among American and Canadian Wage Earners

THE Statistical Bulletin, January, 1927, published by the Metropolitan Life Insurance Co., gives the mortality statistics for 1926 among the more than 17,000,000 industrial policyholders of that company. These policyholders form more than one-seventh of the entire population and more than one-fourth of the urban population of the United States and Canada, and the death rate

among this group is, therefore, indicative of health conditions among the general population.

The number of deaths at ages 1 year and over, in 1926, was 151,343, giving a death rate of 8.8 per 1,000, which was only 4.4 per cent more than the rate for 1925, the best year recorded. The general improvement in health conditions among the industrial population is shown by the fact that in 1926 the death rate was 29.5 per cent below the rate in 1911.

The latest mortality figures available for the entire country are for the year 1925. For the period 1911 to 1925 the death rate in the general population declined only 15 per cent, while among the Metropolitan industrial policyholders the decline amounted to 32.5 per cent, more than twice the reduction in the rate among the people as a whole. The actual saving in lives among the industrial policyholders for the period 1911–1925, over and above the saving expected from the decline in mortality among the general population, was 240,744.

There has also been a greater extension of the life span among the industrial policyholders, as in 1925 the gain amounted to 8.88 years over the life expectancy in the two years 1911 and 1912 combined, the expectation of life at birth among the industrial group being 55.51 years in 1925.

The health record for 1926 was unfavorably affected by the prevalence of influenza during the first four months of the year, which was reflected in the death rates for influenza and pneumonia and also in the mortality from heart disease, chronic Bright's disease, and cerebral hemorrhage, an increase in the deaths from chronic degenerative diseases having followed the earlier outbreaks of influenza.

"Best records" were established for a number of the diseases which are important from the public health standpoint, including typhoid, scarlet fever, and diphtheria. The death rate for tuberculosis was below 100 per 100,000 for the second time in the history of the American and Canadian industrial populations, and while it was slightly above the rate in 1925 the difference was so slight that it was not considered discouraging.

Among the diseases which showed increased mortality rates were cancer which reached the highest point ever recorded for the policyholders' group; diabetes which is again increasing after a decided decline in 1923 and 1924; the degenerative diseases, organic heart disease, chronic nephritis, and cerebral hemorrhage. Heart disease, as in every year since 1921, was the leading cause of death; and cancer was responsible for one death out of every 12. The death rate from alcoholism rose from 3 per 100,000 in 1925 to 3.7 in 1926 and was the highest recorded for this cause since 1917, although the mortality has not yet reached the rate in pre-war years.

There was a very slight decrease in fatal accidents. The death rate was 62.1 per 100,000 in 1926 as compared with 63.9 in 1925, but there has been no appreciable change in the number of fatal accidents during the past four years. The rate for accidental drowning was the lowest ever recorded, there was no change in the rate for accidental burns, the rate for railroad accidents and machinery accidents increased slightly, and there was a small reduction in the number of accidental falls.

Toxic Effects of Ethylene Dibromide

THE results of experiments showing the toxic effects of ethylene dibromide, a constituent of ethyl gasoline, are published in a recent issue of Public Health Reports.[1] The experiments, which indicate that ethylene dibromide is very poisonous, were carried out on guinea pigs and rats and the results show that precaution is necessary to prevent poisoning in its manufacture.

Ethylene dibromide is a colorless, volatile, emulsifiable liquid with an odor similar to chloroform. It is insoluble in water but soluble in alcohol, ether, and gasoline.

The animal experiments consisted of inhalation tests on guinea pigs and painting the skin of rats. Nine guinea pigs subjected to vapor concentrations of commercial ethylene dibromide by single exposures varying from 30 minutes for 0.8 per cent in air to 150 minutes for 0.2 per cent, died within 6 to 18 hours; while from 0.25 cubic centimeter to 1 cubic centimeter of commercial and purified ethylene dibromide painted on the skin of six rats over an area of 2 square centimeters produced death in a period varying from 6 to 18 hours.

No attempt was made to determine the lethal dose of ethyl dibromide either as a result of inhalation or by skin absorption, but when the results were compared with those obtained in experiments with lead tetraethyl it appeared that the two compounds were of nearly equal toxicity. Ethylene dibromide is not an accumulative type of poison as is lead tetraethyl and its use does not, therefore, present as great a health hazard. The principal hazards as regards the use of ethylene dibromide in ethyl gasoline are in connection with its manufacture.

The substance causes irritation of the skin and mucous membranes, and its action on the cells of the various organs and on the vascular system is that of a general poison. The experiments indicate that it is a distinct industrial health hazard.

Moisture as a Causative Factor in Industrial Infections

THE importance of moisture in the production of infections has been demonstrated by a study of several groups of operatives in a silk mill, the results of which are reported by Dr. C. W. Goff in the Journal of Industrial Hygiene, January, 1927 (pp. 18–21). The operatives studied consisted of three groups who handled the raw silk in different processes. The silk is received in the mill in the form of split cocoons and waste silk from the winding processes, which is in a more or less dirty condition. This material is dumped into a large vat where it is boiled with soap and olive oil for a short time, after which it is dried in large steam ovens. In the next process it is put through a series of combings at which time it is sprayed and handled in a slightly dampened state, while in the third process, which is another series of combings and cardings, more moisture is necessary and the hands of the operatives are continually damp or actually wet.

[1] United States Public Health Service. Public Health Reports, Feb. 11, 1927. Toxic effects of ethylene dibromide, by B. G. H. Thomas and W. P. Yant, pp. 370–375.

There were six operatives in the first group, two of whom developed infections of the hands or forearm, which followed lacerations sustained during work. Among the 44 workers in the second group there were 60 injuries with 31 infections. Twenty-five workers in this group had no demonstrable infection. In the third group of 41 workers there was a total of 151 injuries to the hands or forearms, with 117 infections of varying degrees of severity, and there were only 5 of this group of workers who did not sustain any infection.

The incidence of infection, therefore, is shown to be highest in the last group, whose hands and forearms were subjected to a continual softening from the wet material. The workers in the first group, who handle the material directly from the bales, do not come into direct contact with it during the washing and drying process as they use gloves and applicators and their hands and arms are consequently not in a wet condition, while the second group, although subjected to some moisture, has very much less than the third group.

Silk winders' dermatosis occurring among silk workers in France is a moderately severe affection which has been ascribed by one writer to the dead chrysalis with its decomposition products, which irritate the hands of the worker, the condition being aggravated by the softening processes of the water, and by another writer to the presence of a mite which is a parasite of the cocoon.

The silk material handled by the second and third group of workers in the mill studied is boiled and is practically sterile, but sticks, rollers, and machines are not sterilized and may offer a constant source of infection though apparently not an important one and there is another source of infection through the workers wiping their wet hands on their overalls or on soiled towels or rags. The writer regards the possibility of infection by the decomposition products of the chrysalis or fine parasites as of probable importance and also considers this may be an important element in delaying the healing of infections and of noninfected injuries to the hands and forearms.

The proportion of infections of injuries to hands and arms varied from 78 per cent in the third to 50 per cent in the second group and 33 per cent in the first group, the amount of infection being in direct relation to the degree of moisture of the material and the hands of the workers which was the only variable factor of any practical importance. It has been shown that there is an order of micrococcus always present in the lowest layers of the skin and that they become much more active and produce all types of infections when moisture is present in quantities sufficient to soften the hands.

As a result of the severity of the infections found in the groups of operatives studied, the writer concludes that moisture must play a greater part than is generally realized in the production of industrial infections.

Carbon Monoxide, a Common Peril

AN ARTICLE by Edwin E. Fisher in Safety Engineering, February, 1927, on the danger of poisoning from carbon monoxide, shows the wide extent of this hazard.

Carbon monoxide (CO) is an extremely active gas which is ceaselessly endeavoring to find one more atom of oxygen and thus form

carbon dioxide. In contrast with some gases which are chemically inert at normal temperatures but which become violently active at high temperatures, carbon monoxide readily combines with oxygen at ordinary temperature, and this property makes it highly dangerous if inhaled, as it finds the oxygen it seeks in the hemoglobin of the blood.

Carbon monoxide is the product of incomplete combustion of any carbonaceous material, and will not be formed if sufficient oxygen is present and if the process of combustion is not interrupted, as is the case when flames strike relatively cold stove tops, or other fire-resistant materials. The hazard is increased by the fact that the gas is invisible, odorless, tasteless, and nonirritant, so that there is no way in which the body is warned of its presence.

Iron and steel workers are almost constantly exposed to carbon monoxide, as blast furnace and producer gas contain from 25 to 30 per cent of this gas. In mines it is present in "white damp," "after damp," and "powder smoke," and it is also produced in mine fires.

Deaths occasionally occur from carbon monoxide in lime burning and charcoal making; coke plants also present their hazards, as gases containing carbon monoxide escape without the slightest warning to the workers; and gas works are particularly dangerous, since ordinary coal or illuminating gas contains about 16 per cent carbon monoxide, water gas about 30 per cent, and Blau gas, 40 per cent.

In the garment industry there is danger of carbon monoxide from gas-heated pressing irons, as these can seldom be properly ventilated, and the amount of carbon monoxide discharged into the workroom frequently results in chronic poisoning.

Gas-fired type-metal heating kettles for linotype machines are frequent causes of carbon-monoxide poisoning. The symptoms of chronic poisoning from the gas—headache, nausea, and a general feeling of illness—are characteristic among linotype operators, and the cause is rarely suspected.

Numerous deaths occur each year in small and tightly closed private garages. An automobile engine running in a closed garage will in a few minutes produce enough carbon monoxide to cause death. In large or public garages deaths from the poison are less frequent, but there is much "subacute" or "chronic" poisoning from breathing the contaminated air. An investigation of conditions in public garages in 1923 by the New York State Department of Labor showed that ventilation was inadequate in all the garages visited, not one having a system of artificial ventilation. Carbon monoxide was found in the blood of 65.5 per cent of the workers in these garages.

The writer also points out the hazards present in the homes from living-room gas logs, hot-water heaters, kitchen gas ranges, and oil-burning stoves, which should always have outdoor connections.

The Schaefer "prone pressure method of resuscitation[1]," which is generally used now in such cases, is advocated by the writer, who refers also to the pyrotannic-acid[2] method for determination of carbon monoxide in the blood, which was developed by the United States Bureau of Mines.

[1] See Labor Review, February, 1922, pp. 116, 117.
[2] See Labor Review, August, 1923, pp. 168, 169.

Study of Industrial Medicine by National Research Council

THE report of the secretary to the executive board of the National Research Council for October and November, 1926, contains a statement in regard to the first meeting of the committee on problems in industrial medicine which was held in Philadelphia November 15. It was agreed by the committee that there is a need for organized encouragement of research in theoretical and practical problems in industrial medicine, and the following problems were recommended for immediate consideration:

The elimination of occupational dust hazards of all kinds (such as silica, cement, coal, etc.).

The determination of nature and extent of hazards from exposure to metal products and methods for their abatement.

The prevalence and causes of occupational dermatoses.

The effects of organic solvents and vapors upon those exposed to them in the course of their production or use.

The encouragement and professional training of physicians and others to be the competent advisers of industrial and mercantile establishments.

It was decided that a report should be presented at the next meeting of the committee on the existing facilities, personnel, and the resources for research on these problems, and that brief reports should be made on the present state of knowledge in regard to each of the five subjects.

Industrial Accidents in New Hampshire, 1925 and 1926[1]

THE table below gives the record of industrial accidents in New Hampshire for 1924–25 and 1925–26, by cause of injury, as reported to the labor commissioner of that State under the provisions of the law:

INDUSTRIAL ACCIDENTS IN NEW HAMPSHIRE, 1924–25 AND 1925–26

Cause	1924–25		1925–26	
	Nonfatal, but causing loss of 1 week or more	Fatal	Nonfatal, but causing loss of 1 week or more	Fatal
Machinery:				
Prime movers	3		3	
Power-transmission apparatus	27	2	33	1
Metal-working machines	32		31	
Woodworking machines	178		144	1
Leather-working machines	37	1	38	
Paper making and products machines	40		35	
Textile machines	93	1	80	
Laundry machines	2			
Food-products machines	9		5	
Hoisting apparatus and miscellaneous machines	46	1	35	
Vehicles:				
Cars and engines, automobiles, animal-drawn vehicles	36	2	30	1
Nonmechanical:				
Explosions, electricity, fire, and hot substances	47	3	64	6
Poisonous and corrosive substances	17		12	1
Falls of persons	292	2	309	3
Stepping on or striking against objects	104	1	107	1
Falling objects—not being handled by injured	64		59	1
Handling objects	376	1	451	
Hand tools	122		118	
Animals	24	1	18	2
Miscellaneous	164	1	251	1
Total	1,713	16	1,823	18

In addition to the above, 536 slight accidents occurred in 1924–25 and 636 in 1925–26.

[1] New Hampshire. Bureau of Labor. Sixteenth biennial report, for the fiscal period ending June 30, 1926. Concord, 1926, p. 15.

Conference on Elimination of Unnecessary Fatigue in Industry

A SUMMER school featuring discussions on the elimination of unnecessary fatigue in industry will be held at Baveno in the Italian lake region, June 19 to 25, under the auspices of the International Association for the Study and Improvement of Human Relations and Conditions in Industry, according to an announcement issued by the association. The school will be open only to members of the association. The chairman is Mrs. Lillian M. Gilbreth, consulting engineer of Montclair, N. J., and the secretary is Miss M. L. Fleddérus, honorary secretary of the association, Zurich, Switzerland.

The subjects of the lectures are: A résumé of the history of fatigue study, including a statement of the position in the various countries; Work and temperament; Different industries and different fatigues; The length of the working-day and rest periods; The elimination of eye fatigue; The elimination of ear fatigue; The influence of posture on the elimination of fatigue; The elimination of fatigue caused by extremes of temperature, dust, damp, vibration, etc.; Consideration of the influence of indirect causes of fatigue arising from the whole 24-hour situation; and Work and self-expression.

The languages used will be English, French, and German.

The International Association for the Study and Improvement of Human Relations and Conditions in Industry was formed at the International Industrial Welfare (Personnel) Congress held at Flushing, Holland, in June, 1925. Membership in the association "is open to all who are engaged in any undertaking involving the employment of a number of persons, or who are occupied in work of scientific research or social significance bearing on industry, and who are in sympathy with the aims of the association," among whom may be mentioned trade-union officials, factory inspectors, members of industrial boards and councils, educators, and industrial social workers generally. Funds are derived from contributions from members, research sustaining subscribers, and donors. The following 22 countries are represented in the membership: Austria, Australia, Belgium, China, Denmark, Estonia, Finland, France, Germany, Great Britain, Hungary, India, Italy, Japan, Netherlands, Norway, Poland, Rumania, South Africa, Sweden, Switzerland, and the United States. It is the plan to have a congress of members every three years. The governing council, which consists mainly of two "reporters" from each of the countries interested, meets annually to conduct the affairs of the association and to make a study of some special aspect or section of the movement. The first meeting dealt with the development of scientific methods in industry and their effect on those taking part. At this meeting the subject selected for study during the ensuing year was the elimination of unnecessary fatigue in industry. The summer school for the consideration of this subject will be held in conjunction with the annual meeting of the council.

Industrial Accidents in Cuba, 1925–26

A BULLETIN[1] issued by the Secretary of Agriculture, Commerce, and Labor of Cuba reports that the total number of industrial accidents for the fiscal year 1925–26 was 23,926. This figure is an increase over the number occurring in previous years, as is shown by the following statement:

	Number of accidents
1918–19	7, 241
1919–20	11, 687
1920–21	10, 692
1921–22	7, 177
1922–23	9, 063
1923–24	17, 348
1924–25	22, 387
1925–26	23, 926

British Lead Paint Act

THE provisions of the British law regulating the use of lead in the painting of buildings, which became effective January 1, 1927, are given in the Ministry of Labor Gazette (London), January, 1927.

The law provides that the Secretary of State may make regulations prohibiting the use of any lead compound except in the form of paste or of ready-mixed paint, regulate the application of lead paint in the form of spray, and prohibit dry rubbing down and scraping. Regulations may also be issued providing for the periodical examination of persons employed in or in connection with painting with lead paint and for their suspension from such employment if their health is injuriously affected thereby; for the provision of proper washing facilities; for the use of protective clothing; and for the distribution of instructions regarding hygienic measures to be taken by persons using such paints.

The law also provides that on and after November 19, 1927, it shall not be lawful to employ any woman or young person in painting any part of a building with lead paint, with the exception of apprentices employed under arrangements approved by an order of the Secretary of State, made after consultation with the organizations representative of the employers and workers in the trades. Excepted from this provision are women or young persons in special decorative or other work which is not of an industrial character and who are exempted from the provisions of this section by an order of the Secretary of State, or women who are employed in any trade which involves such painting as part of their occupation.

The law requires that all persons employing other persons in painting buildings shall report to the inspector of factories and shall keep a register of those employed on such work, which shall be available for inspection by the inspector of factories, and shall make such returns to the district inspector as may be prescribed.

[1] Cuba. Secretaría de Agricultura, Comercio y Trabajo. Revista de Agricultura, Comercio y Trabajo, Habana, año VIII, vol. 8, No. 2, 1926, pp. 51, 52

In this act the term "lead paint" means any paint, paste, spray, stopping, filling, or other material used in painting which yields to an aqueous solution of hydrochloric acid, a quantity of soluble lead compound exceeding, when calculated as lead monoxide, 5 per cent of the portion taken for analysis. The term "building" includes fixtures.

Industrial Accidents in Spain, 1922 to 1924 [1]

THE Spanish Minister of Labor, Commerce, and Industry has published statistics of industrial accidents in Spain for 1923 and 1924, which are the latest official figures published on this subject. The following table taken from this report gives the total number of industrial accidents for 1922, 1923, and 1924, and the number resulting in death, in permanent total, permanent partial, and temporary disability:

NUMBER OF ACCIDENTS, BY RESULT OF INJURY, IN SPAIN, 1922 TO 1924

Accidents resulting in—	1922		1923		1924	
	Number	Per cent	Number	Per cent	Number	Per cent
Temporary disability	66,545	90.01	82,387	97.04	89,082	97.38
Permanent total disability	239	.33	550	.65	427	.46
Permanent partial disability	122	.16				
Unknown	6,717	9.08	1,575	1.85	1,535	1.68
Death	303	.42	392	.46	437	.48
Total	73,926	100.00	84,904	100.00	91,481	100.00

[1] Spain. Ministerio de Trabajo, Comercio e Industria. Estadística de los Accidentes del Trabajo, Madrid, 1926, p. 25.

WORKMEN'S COMPENSATION AND SOCIAL INSURANCE

Increase in Benefits Under the Federal Employees' Compensation Act

AN ACT of Congress approved February 12, 1927 (Public, No. 603), achieves the much-desired end of providing more adequate benefits for injured employees of the United States. When the present law was enacted in 1916, it adopted the basis of 66⅔ per cent of the wages of the injured workmen, but limited the wage basis to $100 per month, thus preventing any award in excess of $83.33. By this amendment the wage base becomes $175, affording maximum benefits of $116.66 with a minimum of $58.33 monthly unless the pay is less, when benefits shall become the monthly pay. This minimum takes the place of the former minimum of $33.33.

Burial expenses may now be $200 instead of $100 as formerly.

Insurance by Organized Labor

TRADE-UNIONISTS now have in operation two insurance companies—the Union Cooperative Insurance Association and the Union Labor Life Insurance Co.

The Union Cooperative Insurance Association was organized in November, 1924, by the International Brotherhood of Electrical Workers. The association has a paid-up capital and surplus, all of which is held by the international or the local unions affiliated to it. It writes participating and nonparticipating policies for individual and group life insurance and has in force policies aggregating $6,230,161. Probably the first group insurance issued to labor unions was written by the association; previously, such insurance was written only for employees of individual establishments. It also issues special home-protection policies to cover mortgages on policyholders' homes, which decrease in amount and premium as the mortgage is paid off.

The Union Labor Life Insurance Co. was organized in the fall of 1925, with an authorized capital of $1,000,000. Stock ownership in the company is limited to trade-unions affiliated to the American Federation of Labor or approved by it. Unions are limited to $40,000 each and individuals to $250. The books were closed to stock subscriptions on January 31, 1927, with more than $700,000 paid in, and the company expects to begin writing policies in the very near future.

The company will write life insurance, specializing in group insurance. Dividends on stock are limited to 6 per cent, and the profits remaining after provision is made for the surplus are to be returned to the policyholders. All policies are to participate in the dividends.

Both companies, though limiting the ownership of stock to trade-unionists, will write policies for the general public.

Report of Minnesota Industrial Commission

THE Industrial Commission of Minnesota is one of a number of such State commissions charged with the general responsibility of labor law administration. The biennial report for the period July 1, 1924, to June 30, 1926, is a volume of 206 pages, of which 74 are devoted to the subject of workmen's compensation. A brief sketch of legislation is given, showing the development of the law from 1913 through its revision and reenactment in 1921, up to amendments of 1925, when "the Minnesota workmen's compensation law was materially improved."

An elaborate presentation of statistical data is given, the commission speaking of it as "the most pretentious it has ever attempted." It is, in fact, a most thorough analysis of compensation data, showing numbers, costs, wage loss, distribution by nature of injury, causes, industry, extent of disability, etc.

An unusual, if not unique, record is presented in the fact that the number of employers electing not to be bound by the compensation provisions of the act was greater at the close of the second year covered by the report than at the beginning of the period. The number thus rejecting at the end of the fiscal year 1925 was 2,557, while on June 30, 1926, it was 3,677. There was also an increase in the number of employees electing not to come under the act; the number is still negligible, however, only 438 being listed as rejecting the act in 1925 and 562 in 1926. On the other hand, 12 employers rescinded their adverse election during 1925 and 60 during 1926. Farmers, many of them threshermen and balers, have increasingly accepted the terms of the act, the number totaling 1,850 on June 30, 1926, as against 1,440 on the same date in 1925.

The number of accidents reported during the first year was 39,278, as compared with 45,318 for 1926, or a total of 84,596 for the biennium. Of this number, 13,330 were compensable and 25,948 noncompensable the first year as against 14,155 compensable and 31,163 noncompensable in 1926. The number of fatal accidents was 157 in 1925 and 150 in 1926. The following summary as to closed cases is quoted from the report:

> A total of 44,493 accident cases which resulted in either time or financial loss, or both, were closed during this biennium. Of this number, 448 were fatal, 14 caused permanent total disability, 2,802 permanent partial, 28,923 temporary total disability beyond one week, and 12,306 temporary total disability of one week or less. There were 32,187 compensable cases closed during this biennium, as compared with 28,770 for 1923–24, or an increase of 12 per cent for 1925–26. This increase is divided as follows: 36 per cent in fatal cases, 63 per cent in permanent partial, and 8 per cent in temporary total disabilities beyond one week, as compared with our last report, while the permanent total disabilities decreased 17 per cent. A study of these figures shows that 32 per cent of the accidents were caused by handling of materials; 16 per cent by falls of persons; 13 per cent by hand tools; 10 per cent by machinery; 7 per cent by vehicles; and 32 per cent by other causes. Injuries in the nature of cuts, punctures, and lacerations were responsible for 33 per cent of all these accidents; 31 per cent were caused by bruises, contusions, and abrasions; 15 per cent by sprains and strains; 12 per cent by fractures; and the remaining 9 per cent were miscellaneous injuries not classified.

The total number of days lost is given at 5,696,470. This total is made up of 1,014,735 actual working-days lost, plus 4,681,735 weighted days lost computed on the basis of 6,000 days for each

case of permanent total disability or fatal injury. The actual net wage loss computed on the basis of all accidents reported amounted to $2,274,612, of which 81 per cent was due to temporary total disability cases, 15 per cent to the healing period in permanent partial disability cases, and 4 per cent to temporary total disabilities of less than one week, not compensated.

The amount of compensation received by injured workmen and their beneficiaries during the period covered was $5,261,677, of which 42 per cent was for permanent partial disabilities, 41 per cent for temporary total disabilities, 16 per cent for fatal cases, and 1 per cent for permanent total disabilities. Medical costs called for an additional amount of $1,958,319, or an average of $44 per case. A summary of closed cases by extent of disability shows, among other items, wage loss and compensation cost for the year ending June 30, 1925, an actual wage loss in 1,433 permanent partial disability cases of $176,108 for the healing period, for which compensation is reported in the amount of $246,623. Similarly in 14,366 cases of temporary total disability compensated, there was an actual wage loss of $922,464, compensation costs being reported at $1,089,775. On this basis the average wage loss per case was $64 and the average compensation cost per case, $76. It will be noted that these figures are unusual in a presentation of a compensation cost in excess of an actual wage loss. It will be remembered that in Minnesota compensation amounts to 66⅔ per cent of the wages.

In the 239 fatal cases during the year 1925, $394,153 was paid to 425 dependents, an average of $927 for each dependent. Of these, 48 were widows receiving an average amount of $2,351, while widows with children, 78 in number with 280 dependents, received an average for each dependent of $780. In 1926, 48 widows with no other dependents received an average of $3,047, while 69 widows with other dependents making 259 as a total, received an average of $863.

A comparative 13-year summary for the life of the act shows 130,556 closed cases for which $16,263,782 has been paid in compensation. The latest year (1926) shows the largest numbers in both these classes, the number of cases being 16,141, while the yearly average was 10,240; and the amount of compensation paid was $2,663,862, as against an average annual payment of $1,274,811.

As already stated, the statistical presentation is quite full, and gives a very complete picture of the operations of the act and its beneficent results distributed widely among industries and workers.

Study of Workers Insured Against Unemployment in Great Britain

THE British Ministry of Labor has recently issued a study of the employment and insurance history of those coming under the terms of the unemployment insurance scheme. Earlier studies have been made dealing with those drawing unemployment benefit, but this is the first attempt to deal with the whole body of insured workers, employed and unemployed alike. In July, 1925, the estimated number of insured persons was 11,500,000, and as this number was far too large for the kind of study desired, the sample method

was used. Records covering 80,233 cases were taken, being selected on the basis of one from every 218 accounts, and the results obtained from these were tested by every means possible to see whether they were applicable to the whole body of insured workers. The margin of error was found to be practically negligible. At the beginning of July, 1925, nearly three-fourths of this selected group (72.7 per cent) were in effective insurance; 7.2 per cent applied for unemployment books but never became effectively insured, and 20.1 per cent had passed out of insurance, either by death, marriage (in the case of women), or transfer from an insured to an uninsured occupation. The study was devoted mainly to the 72.7 per cent (numbering 58,347) who at the date mentioned were in effective insurance.

Proportion Drawing Benefits

OF THE insured group, 52.3 per cent (53.8 per cent of the males and 48 per cent of the females) had drawn unemployment benefit at some time between 1920 and the time of the inquiry.

The proportions vary, of course, for the different industries. Those which have had a high rate of unemployment for some time show the highest proportions of individuals who have drawn benefit at some time or other. For example, among males, lead, tin, and copper mining has 90.5 per cent; puddling furnaces and iron and steel rolling mills, 84.4 per cent; cotton, 83.2 per cent; pig iron, 82.3 per cent; shipbuilding and ship repairing, 77.3 per cent; marine engineering, 74 per cent; woolen and worsted, 69.4 per cent; coal mining, 47.8 per cent. At the other end of the scale are distributive trades, 31.6 per cent; printing, publishing, and bookbinding, 31 per cent; professional services, 22 per cent. With females the cotton and woolen textile industries show the highest percentages for those who have drawn benefit (cotton, 82.2 per cent; woolen, 71.6 per cent). The tailoring trade, which is subject to seasonal fluctuations, has 58.7 per cent; "other" metals, 58.2 per cent; and cocoa, chocolate, and sugar confectionery, 54.8 per cent. Silk and hosiery have 51.3 per cent and 54 per cent, respectively, and the domestic services (hotels, clubs, boarding houses, etc.), 37.1 per cent. The distributive trades have the comparatively low figure of 26 per cent, and laundries, dyeing, and dry cleaning, 24.6 per cent.

Relation Between Contributions and Benefits

EACH insured worker, while employed, must pay a weekly contribution into the insurance fund. Taking the males studied, it was found that the total number of contributions paid was nearly double the total number of days through which benefit was drawn.

The average number of contributions paid up to July, 1925, calculated on the number of insured males who had paid contributions, was 233, while the average number of days' benefit drawn, calculated on the same number of individuals, was 122. The average number of days' benefit drawn by each recipient was 226.

In other words, while each of the insured males had paid, on the average, contributions for 233 weeks, a little over one-half of them had received benefit, on the average, for 226 days. In two industries, and only two, the days of benefit exceeded the weeks of contributions. One of these was shipbuilding and ship repairing, in which acute depression prevailed for a long period, and in which the average number of weekly contributions paid was 325, and the average number of days for which recipients drew benefit was 458. The other was canal, river, dock, and harbor service, which includes a large proportion of casual workers and which came into the insurance scheme in November, 1920; here the average number of contributions paid was 205, and the average days' benefit per recipient 312.

In the case of women the difference between the number of weeks' contributions and the number of days of benefits is even more striking than in the case of the men.

The average number of contributions paid up to July, 1925, calculated on the number of insured females who had paid contributions, was 161; the average number of days' benefit drawn, calculated on the same number of individuals, was 69; while the average number of days' benefit drawn by each recipient was 144.

In other words, each insured female paid, on the average, contributions for 161 weeks, or a trifle over three years, while those who received unemployment benefit (48 per cent of the whole group) drew it for 144 days.

The cotton industry is the only one in which the total days of benefit drawn exceed the total number of contributions paid, although the pottery industry has also a high proportion of benefit to contributions. In the cotton industry the average number of contributions is 149, while the average amount of benefit drawn by each recipient is 184 days.

Age in Relation to Unemployment

A VERY detailed study of the age grouping of the cases studied seemed to show that age was not an important factor in retaining employment. "The age distribution of the individuals who lodged claims during the period February, 1925, to March, 1926, is very similar to that of all insured persons." Such differences as were found appeared to show that for females the age group 25 to 29 is subject to worse continuity of employment than any other group until the age of 55 is reached. When it comes to regaining employment, however, the higher age groups are at a disadvantage.

It is clear that age had been a factor in the problem of unemployment from age 45 onward in the case of males and age 35 onward in the case of females. At April 12, 1926, 6.8 per cent of the males age 20–44 in the sample and 3.3 per cent of the females aged 18–34 had benefit claims current at employment exchanges, and if the percentages at the higher ages had been no greater than these there would have been approximately 632,000 claims current at exchanges for males and 120,000 for females. There were, in fact, at April 12, 1926, approximately 691,000 for males, and 132,000 for females, thus giving an excess at the higher ages of approximately 59,000 insured males and 12,000 insured females, while the average level of unemployment among insured persons was 9.2 per cent.

Proposed Changes in English Unemployment Insurance

IN NOVEMBER, 1925, the English Government appointed a committee, generally known from the name of its chairman, Lord Blanesburgh, as the Blanesburgh committee, to "consider, in the light of experience gained in the working of the unemployment insurance scheme, what changes in the scheme, if any, ought to be made."

The membership of the committee included both employers and trade-union leaders, and in view of this fact there was some surprise when, after exhaustive hearings and investigations, a unanimous report was presented. A full summary of its terms is given in the Ministry of Labor Gazette (London) for February, 1927.

Historical Review

THE report begins with a historical review of unemployment insurance in Great Britain, tracing it down through various forms of union action to the act of 1911, which applied to selected trades containing about two and a quarter million workers. By 1920 a large fund had been accumulated, and when in that year the postwar depression swept the country, the act was suddenly extended to take in practically all of the manual workers, except those in agriculture and domestic service, thus throwing an unexpected and tremendous strain upon the scheme at a time when the unprecedented unemployment made it impossible that the revenue of the fund should be increased in proportion to the new demands made upon it.

The report explains how a surplus of £21,000,000[1] in the unemployment fund, which existed at the passing of the 1920 act, was rapidly dispersed by the subsequent heavy unemployment, and how, in spite of great increases in the contributions, there was before the general strike still a deficit of £7,000,000. The general strike and the stoppage in the coal-mining industry set back a promising improvement in trade and caused serious embarrassment to the unemployment fund, increasing the deficit to well over £21,000,000.

Reported Abuse of Unemployment Insurance Plan

THE committee discusses the repeated assertions that the unemployment insurance scheme is subjected to widespread abuses, and finds little or no support for these statements. There is a certain number of puzzling cases, in which there is room for honest difference of opinion as to whether or not benefits should be allowed, and these cases may be responsible for the idea that imposition is frequent. Cases of attempted fraud, it points out, are almost negligible. Nevertheless, all unemployment insurance schemes contain "subtle tendencies to abuse," and "no system can claim to be completely satisfactory which does not by its corrective provisions succeed in neutralizing these tendencies." For this purpose, certain restrictions are necessary in the interests of the public which can not be wholly acceptable to the insured contributors.

Principles of a Satisfactory Plan

THE committee found that it was recognized by every one who appeared before them that an unemployment insurance scheme must be regarded as a permanent part of the English code of social legislation—a view in which the committee itself concurred. The terms of its appointment, the committee felt, obliged it to consider only a contributory system. It decided upon the following as the principal conditions with which a contributory system must comply:

1. The worker's contribution must be moderate in amount. It should never normally exceed 5d[2] a week, and, supplemented by the contribution of his employer and the State, should secure him an insurance sufficient in the great majority of cases to save him, during inevitable unemployment, from recourse to public assistance.
2. The scheme must not, by the extent of benefit promised, tempt the insured contributor to improvidence when in receipt of good pay.
3. It should provide benefits definitely less in amount than the general laborer's rate of wage, so that there may be no temptation to prefer benefit to work.

[1] Pound at par=$4.8665; exchange rate about par.
[2] Penny at par=2.03 cents; exchange rate about par.

4. It must not interfere unduly with the mobility of labor in this country.
5. It must not deter from emigration those who would be benefited by a life overseas.
6. Subject to these conditions, the scheme should be made as attractive in its benefits to the insured contributor as, on a strictly actuarial basis, it is possible to make it.

Main Features of Proposed Plan

IN ACCORDANCE with these principles, the committee recommends, first, that there should be an unemployment fund to which employers, employed, and the state should contribute in equal proportions. The contributions must be of "amounts actuarily certified to be sufficient to enable the outgoings in benefits and administration to be met over a trade cycle." Second, the scheme should apply to substantially the same persons as those included in the present scheme. Third, the present rates of benefit and of contribution should be revised, the former slightly and the latter substantially in a downward direction. The present and the proposed weekly rates of benefit are shown below.

WEEKLY RATES OF BENEFIT

[Shilling at par=24.3 cents; exchange rate about par]

Class of beneficiary	Present rates	Proposed rates	Class of beneficiary	Present rates	Proposed rates
	s.	*s.*		*s.*	*s.*
Men, over 21	18	17	Women, 18–21	15	8
Men, 18 to 21	18	10	Girls, 16 to 18	6	5
Boys, 16 to 18	7½	6	Adult dependents	5	7
Women, over 21	15	15	Child dependents, (under 14)	2	2

It will be seen that the rates of benefit for boys and girls are reduced somewhat, and that those for young people of 18 to 21 are severely cut. This reduction is justified by the committee on the ground that usually persons in this age group have less responsibility for others than adults normally have. The benefit for a man over 21 is reduced by 1s., but the allowance for an adult dependent, in which term a wife or housekeeper is included, is increased by 2s., so that the married man gains slightly over the single man. The conditions for drawing benefit are laid down as follows:

A claimant for unemployment benefit should be entitled to it, subject to a waiting period of 6 days, provided—
1. That at least 30 contributions have been paid in the previous two years in respect of him.
2. That he is genuinely seeking work but unable to obtain suitable employment, and is capable of and available for work.
3. That he is free from the disqualifications for benefit, showing particularly (*a*) that he has not left his employment voluntarily without just cause or been dismissed for misconduct; (*b*) that he is not affected by the trade dispute qualification.
In the case of juveniles, the payment should also be conditional on attendance at an approved course of instruction, where such instruction is available.

This plan would do away with the present distinction between "standard benefit," to which the claimant is entitled who could fulfill the conditions imposed by the 1920 act, and "extended benefit," granted in anticipation of future contributions to persons who could not fulfill

the standard conditions but were nevertheless genuinely unemployed. Under the present plan, this extended benefit can be granted practically continuously at the minister's discretion. Under the new plan no limit is set for the period over which benefits may be paid, but it is provided that if a claimant has drawn more than 13 weeks' benefit in six months, his claim should be reviewed by the courts of referees. The committee recommends that a fuller definition of the phrase "genuinely seeking work" should be made and incorporated in the statutory conditions to be fulfilled before benefit may be granted. It also advises a revision of the rules concerning those out of work on account of a trade dispute and makes a number of general recommendations.

Financial Basis of Proposed Scheme

THE present and the proposed rates of contribution are shown in the following tables:

PRESENT AND PROPOSED WEEKLY RATES

[Shilling at par=24.3 cents, penny=2.03 cents; exchange rate about par]

Class of contributor	Present rates			
	Employer	Employee	State	Total
	s. d.	s. d.	s. d.	s. d.
Men, over 18	0 8	0 7	0 6	1 9
Boys, 16 to 18	0 4	0 3½	0 3	0 10½
Women, over 18	0 7	0 6	0 4½	1 5½
Girls, 16 to 18	0 3½	0 3	0 2¼	0 8¾

Class of contributor	Proposed rates			
	For each of the three parties		Total	
	Normal	Temporary	Normal	Temporary
	d.	d.	s. d.	s. d.
Men, over 21	5	6	1 3	1 6
Men, 18 to 21	4	5	1 0	1 3
Boys, 16 to 18	2½	3	0 7½	0 9
Women, over 21	3½	4	0 10½	1 0
Women, 18 to 21	3	3½	0 9	0 10½
Girls, 16 to 18	2	2½	0 6	0 7½

The temporary rate here shown is made by adding not over 1 penny to the normal or permanent rate, this addition to be used for the payment of the debt on the existing fund at the time it is wound up. As soon as this is accomplished the addition is to be dropped and the permanent rates are to come into effect. It is calculated that if the new scheme should be adopted at once it would take about four years to wipe out the present debt.

The committee discusses at some length the reasons which led it to adopt these figures as representing the contributions necessary to finance the new scheme successfully.

The amount of the contributions must be settled with reference both to the benefits and the costs of administration, and also to the probable amount of unemployment. Experience appears to show that unemployment fluctuates with a certain degree of regularity over what is known as a "trade cycle," and

they propose that the finance of the fund should be so arranged that incomings and outgoings balance over such a period. On the question of the average amount of unemployment over a trade cycle they consulted the Government actuary, who, with the limited data at his disposal, said that, taking a broad view of the problem, he is inclined to think that in adjusting the finance of the scheme a rate of 6 per cent should be assumed. On this basis the finance of the scheme has been settled. In order that a surplus or deficiency may not reach unwieldy proportions an actuarial inquiry into the scheme is recommended every five years. Considerable emphasis is laid on the actuarial soundness of the scheme and the committee think it well to record their view that "no changes in the scheme should ever be made without due regard to their effect on the actuarial integrity of the scheme as a whole."

The committee recognizes that at the present time the scheme could not be introduced with a prospect of success from an actuarial point of view, since the number of unemployed is too large to make the above percentage of unemployment a possible average until times improve. The unemployed insured workers on January 31, 1927, numbered approximately 1,375,000, or about 12 per cent of the insured body, or nearly twice the average figure under which the proposed scheme would become sound. This is the more serious because of the "marked deterioration in the economic position of the country" due to the general strike and the coal-mining dispute, which makes the reestablishment of the normal cycle a matter of some doubt. This, it is thought, "may have the effect of postponing the initiation of the new scheme, with its rates of contribution, though the committee hope that this postponement will not be a matter of years but of months."

Statistics of Workmen's Compensation in England

THE British Home Office has recently issued a report for 1925 of proceedings under the workmen's compensation acts and the employers' liability act, giving data for seven leading industries. The aggregate number of persons in these industries coming under the operation of the acts was 7,541,014. Data for the year showed an increase in fatal and a decrease in nonfatal cases.

Taking the fatal and nonfatal cases separately, the number of fatal cases rose from 2,878 to 3,030, an increase of 152 or 5.3 per cent, and the compensation paid from £786,444[1] to £864,726, an increase of £78,282 or 10 per cent. The nonfatal cases fell from 487,442 to 473,055, a decrease of 14,387 or 3 per cent, and the amount paid fell from £5,888,594 to £5,778,204, a decrease of £110,390 or 1.9 per cent.

The ratio of compensation cases to the number of persons employed is shown for each of the seven industries in the following table:

NUMBER OF EMPLOYEES AND RATIO OF COMPENSATION CASES TO PERSONS EMPLOYED, IN GREAT BRITAIN, 1925

Industry	Number employed	Number of cases per 1,000 persons employed	
		Fatal	Nonfatal
Shipping	207,194	1.5	33.4
Factories	5,318,658	.2	38.1
Docks	142,550	.9	86.9
Mines	1,157,085	1.1	184.2
Quarries	76,274	1.2	88.5
Constructional work	108,813	.6	81.2
Railways	530,440	.6	41.8
Total	7,541,014	.4	62.7

[1] Pound at par=$4.8665; exchange rate about par.

Figures covering the five years from 1921 to 1925, inclusive, show that in 1921 the ratio of fatal cases to persons employed was 0.3 per 1,000, that in 1922 it rose to 0.4, and has since remained there without change; in 1921 the ratio of nonfatal cases was 38.7, the next year it was 54.2, in 1923 it was 65.0, and in 1924 it decreased to 64.9, from which it fell to the 1925 figure given above. A considerable part of this increase is ascribed to the rise in minor accidents, the proportion causing disablement for less than four weeks having risen from 55.16 per cent in 1921 to 63.83 per cent in 1925.

It will be observed that the mining industry ranks high in the ratio of fatal and nonfatal cases alike. Both shipping and quarrying exceed it in the ratio of fatal cases, but neither of these industries approaches it in size, so that their absolute number of fatalities fall much below those of the mining industry, while no other group furnishes even half so large a ratio of nonfatal cases. Expressed in percentages, the results are even more obvious. Not quite one-sixth (15.3 per cent) of the 7,541,014 workers covered were employed in mining, yet this industry furnished 41.3 per cent of the fatal accidents reported, 43.3 per cent of the nonfatal accidents, and 91.4 per cent of the nonfatal cases of industrial disease.

In the seven industries, industrial diseases accounted for 41 of the fatal and 17,256 of the nonfatal cases.

The 41 fatal cases included 17 of lead poisoning, 4 of anthrax, 1 of arsenic poisoning, 1 of poisoning by nickel carbonyl, 14 of epitheliomatous cancer, 1 of compressed air illness, 2 of nystagmus, and 1 of beat knee.

As in previous years, the bulk of the cases occurred in the mining industry, and were chiefly due to miner's nystagmus, beat hand and beat knee. Those diseases, together with beat elbow and inflammation of the synovial lining of the wrist joint and tendon sheaths, numbered 15,886 or 91.8 per cent of the total number of cases. Of the remainder, 691, or 4 per cent, were cases of dermatitis produced by dust or liquids, 411, or 2.4 per cent, were cases of lead poisoning, and 184, or 1.1 per cent, were cases of skin or other ulceration or cancer. The remaining 125 cases, or 0.7 per cent, included 63 cases of various forms of industrial poisoning and 27 cases of anthrax.

Cases of miner's nystagmus showed an increase during the year, the new cases rising from 3,271 in 1924 to 3,445, and the old cases from 7,635 to 7,890. This disease alone accounted for over 65 per cent of all the cases of industrial disease handled. The number of cases reported has increased very rapidly since 1908, the first full year after the disease was scheduled under the act, when only 386 new and 74 old cases were listed.

Cases of dermatitis have also been steadily growing, from 270 in 1919 to 691 in 1925. They occur in a great variety of industries, but chiefly among workmen employed in the baking and confectionery trades and in dyeing.

Regulations for Salvadorean Employees' Compulsory Savings Fund

THE November 10, 1926, issue of Diario Oficial contained the regulations for the compulsory savings fund for commercial employees provided for in the Salvadorean law passed May 29, 1926.[1] Employees are required to pay the following percentage of their salaries into this fund: Salaries up to 50 colons,[2] 2 per cent;

[1] A summary of this law appeared in the November, 1926, issue of the Labor Review, pp. 91, 92.
[2] Colon at par = 50 cents; exchange rate varies.

from 51 to 100 colons, 3 per cent; from 101 to 200 colons, 5 per cent; from 201 to 300 colons, 8 per cent; and over 300 colons, 10 per cent. These amounts are deducted from the salaries by the employers, who are required to pay the sum so deducted into the fund during the first 10 days of the month.

A board of directors elected by a majority of the General Assembly, which is composed of all the depositors, is to manage the fund.

Depositors may withdraw their savings during the accumulation period under the following circumstances: When they cease to be commercial employees; when unemployed for a month or more; and when absent from the country for six or more months. A depositor may withdraw up to 50 per cent of his savings in case of serious illness of himself, his wife or child, or the death of either of the latter. In the case of the death of a depositor his savings will be paid to his heirs.

HOUSING

Housing Progress and Guild Building in Scotland

THE report of the Scottish Board of Health, covering the year 1925, gives some data as to developments in the housing situation. The number of houses completed during the year for which some form of State assistance was given amounted to 8,201 as compared with 4,384 in 1924 and 6,618 in 1923. The number of houses in process of construction at the end of the year was 13,311, as against 9,808 at the close of 1924. As the estimated number of new houses required annually is 20,000, the year's results, though an improvement on the past, were not satisfactory. Special measures were taken to speed up construction, and in particular the Government tried to promote the erection of steel, concrete, and timber houses, which would not require so large a proportion of skilled labor as the brick and stone houses generally used. A dispute arose over the proper wages for workmen employed upon these substitute houses, however, and not much progress was made in their construction. The position at the close of the year is thus summarized:

> While these special proposals were being considered, the promotion of schemes by ordinary methods of construction was being pushed forward, and, as already indicated, the number of houses erected during 1924 was almost doubled in 1925, making a total of 36,216 houses completed up to the end of 1925 under the various schemes of financial assistance from 1919 onwards. In addition, the number of houses under construction at the end of the year was 13,311, as compared with 9,808 at the end of 1924, while proposals had been approved for the erection of 14,410 houses which had not been commenced. There were, therefore, at December 31, 1925, 63,937 houses completed, in course of erection, and immediately contemplated, with the aid of Government subsidies.

For the sake of seeing how far unassisted private enterprise was making the requisite provision for new housing, reports were secured from the local authorities as to the number of such houses built annually. In 1924 there had been 1,553, and in 1925 the number had risen to 1,852, from which it is concluded that "this form of private enterprise has not functioned to any great extent in Scotland in recent years."

Guild Work

THE report presents a study of results in the case of two contracts made with the Housing Guild, which show the greater economy of guild work. In one case, 160 houses were to be built in Dunfermline, and the contracts for the brick and carpenter work were given to the guild, which bid for it in competition with other firms, the basis of the bids being the same for all competitors.

The value of the work at completion, after due allowance had been made for reductions in wage rates and material prices occurring after the bids were in, was £68,468.[1] The guild was to receive its actual expenditure for wages and materials, plus 10 per cent, provided the total fell within the amount of £68,468; if the total exceeded

[1] Pound at par=$4.8665; exchange rate about par.

this figure, the guild must bear the loss; if it fell below, the resultant saving was to be divided in the proportion of 75 per cent to the local authority and 25 per cent to the guild.

The actual ascertained costs, including the guild's 10 per cent, amounted to £56,341, showing a saving of £12,127 or £76 per house on two trades only. The net saving to the local authority, after allocation of gross saving between themselves and the guild, amounted to £8,709.

Further, the quality of the work has been the subject of much praise, and compares very favorably with the average produced by other contractors on similar schemes throughout the country.

In the second case, two groups of houses, one numbering 20 and the other 50, were to be erected at different sites, and owing to local conditions, there was much difficulty in letting the work of plastering. The guild's offer was more favorable than any other secured, so the work on both schemes was given to it.

Although the tenders by the guild were on the usual basis, i. e., on schedule rates, and subject to increase or decrease according to fluctuations in cost of labor and material, the contracts were actually carried out on the guild basis of actual cost of labor and material plus 10 per cent. Unlike the contract in the case of Dunfermline, referred to above, no share of any saving went to the guild.

Nevertheless, the work was accomplished at a saving of £628 in the case of the 20 houses, and of £1,284 in the case of the 50.

The cost of the work to the local authority under the guild form of contract worked out at no less than 41 per cent under the estimate in the case of Renton and 34 per cent in the case of Alexandria, results which are rather remarkable, especially having in view the fact that a scarcity of labor was experienced in the locality, and labor at additional cost had to be imported.

WOMEN IN INDUSTRY

Wages and Hours of Women and Boys in Minnesota, 1925

WAGE statistics presented in the third biennial report of the Industrial Commission of Minnesota, 1925–1926, show that of 33,784 women and boys, 3,457 (or 10.2 per cent) received less for the week of November 21, 1925, than the minimum wage of $12 fixed for experienced workers for a week of 36 to 48 hours. Of this number 2,720 were undoubtedly learners (as defined in wage order No. 12), since they had been less than 12 months in the service of their employer. In this particular group 1,010, in addition to their wage, received room or board or both. Where such provision is made the wage order is seldom violated.

Of the 33,784 women and minor males for whom wage data were ascertained, 2,927 (or 8.7 per cent) were provided with board or room or both, the money equivalent of which was not reported. The number and percentage of these workers in four different wage groups are given below:

Wages per week:	Number	Per cent
Less than $12	3,457	10.2
$12 and under $15	9,440	27.9
$15 and under $20	11,638	34.5
$20 and over	9,249	27.4

The average weekly wage for Minnesota as a whole was $17.37.

During the biennium $15,059 was secured through wage adjustments, 323 employers and 1,203 employees being involved. Many of these adjustments were effected as an outcome of further investigation after these reports on pay roll had been received by the commission.

The table below, giving the hours of women and boys for the week ending November 21, 1925, shows that in each of the specified hour groups the greatest number of workers is found in the high-wage divisions:

WAGES AND HOURS OF WOMEN AND BOYS IN MINNESOTA, WEEK ENDING NOVEMBER 21, 1925

Wages per week	Number of employees working—			
	40 hours and under 44	44 hours and under 48	48 hours and under 54	54 hours and under 60
Less than $8	40	45	37	60
$8 and under $9	34	27	58	49
$9 and under $10	60	54	149	62
$10 and under $11	256	128	348	158
$11 and under $12	200	285	375	140
$12 and under $13	318	965	2,179	283
$13 and under $14	200	687	1,686	291
$14 and under $15	204	605	1,246	254
$15 and under $20	791	3,251	5,934	1,098
$20 and under $25	439	1,512	2,440	467
$25 and over	442	1,214	1,606	295

Attention is called to the fact that of the 8,773 employees in the 44 and under 48 hour group, 3,251 (or 37.1 per cent) were in the $15 and under $20 wage division and that 1,512 (or 17.2 per cent) were being paid $20 and under $25.

WORKERS' EDUCATION AND TRAINING

Research Work of a Milwaukee Workers' School

AN INTERESTING attempt on the part of a group of students in the Milwaukee Workers' College to study the problems of their own industry is described in an article in Workers' Education of February, 1927.[1]

The Milwaukee class numbers 18 union workers from about 10 of the building trades. Six of the 18 students are business agents, the others are either local union secretaries, executive board members, or members of the rank and file. It is being more clearly realized that "the successful trade-union official has to be a trained negotiator and bargainer * * * he must possess the facts of the industry." This need is met through a discussion of the problems closely related to the work of the trade-union students. For example, the class was not so interested in unemployment in general as in seasonal unemployment, because such unemployment more seriously affects the building trades. The Madison class found that it was entirely ignorant of the amount of seasonal unemployment and did not know to what extent it tended to reduce the worker's annual wage.

All sides of the problem were studied—its importance in the building trades, its reflex upon trade-union affairs, the industrial conditions from which it arises, and the solutions that have been attempted both by employers and labor.

The discussion was made more vital by the fact that in 1921 the building trades in Madison went through an expensive lockout in connection with a wage cut. The arbitration board to which the controversy was referred was interested principally in the annual wage of the workers and the unions had no statistics on this very vital matter. As the outcome of this class discussion on seasonal unemployment, a committee was created to consult with the instructor with a view to installing permanent unemployment records in all the Madison building-trades unions. Records of this kind are now being established and the building trades of that city will in the future have accurate data on this subject.

The discussions in the building-trades class in Milwaukee also brought out the need for reliable trade-union statistics. In talking over the question of how effectively the building trades were unionized in Milwaukee, the estimates of the union membership by business agents who had been connected with the industry in Milwaukee itself for from 10 to 35 years varied from 28,000 to 32,000. A committee of three business agents was appointed to investigate the matter and found, to the amazement of the officials, that there were only between 10,000 and 11,000 building-trades workers in the city. As a result of these findings, one member was selected for each trade to secure information on "the number of workers, the percentage organized, the strength of the contractors' association, the obstacles

[1] Workers' Education, New York, February, 1927. "Workers' education and the workshop," by William G. Haber.

which have stood in the way of organization, etc." Such reports are submitted to the class and give rise to very practical debates.

Various other problems are presented from a practical angle whenever possible. The attitude of officials in attendance on classes when jurisdictional disputes are touched upon indicates the very great importance of this subject. On one occasion the instructor referred to a particular dispute of this character and in the subsequent discussion the question of the amalgamation of the two organizations arose. The business agent of one of them was a student in the class. Since then he has never missed a session. The fact that the union officials felt that the class afforded them an opportunity to present their particular cases constituted the primary obstacle to the constructive examination of the whole question by the class.

The technical developments in the building trades and the resultant problems have also been studied by the class. At the members' request, three weeks were spent on a study of "The contracting business, the organization of the contractors, and the competitive evils in the industry."

Other subjects to be handled are apprenticeship, the history of national and local unions, and of employers' associations, the question of trade-union administration, the closed and open shop, and the methods the unions are using to overcome the latter. Another important subject is the unions' organizing tactics, which are necessary in this industry in view of the recent alliances between the building contractors, bankers, and business interests, as they exist in Milwaukee, Detroit, San Francisco, and other open-shop building-trade cities.

The writer feels that the value of the courses will be considerably increased if the students are allowed to assist in gathering some of the information.

Incentives for Apprentices [1]

A LARGE electric and manufacturing company has found the following incentives productive of favorable results among apprentices:

(1) A wage increase every six months.
(2) Bonus on completion of the training.
(3) Wage based on merit shown during course.
(4) Best apprentices allowed to finish in shorter time than standard.
(5) Diploma to those finishing course.
(6) College scholarship awarded on merit.
(7) Responsible work after finishing course.
(8) Part of the apprentice training given in a subsidiary plant.
(9) Choice by apprentices of the department of work, depending upon merit.
(10) Special attention by foremen.
(11) Good progress report in house journal.
(12) Award of medals and fobs.

Educational Activities of Women's Trade Union League of New York

DURING the last term there was an enrollment of 130 women in the Women's Trade Union League's evening classes in New York City, according to the Workers' Education News (New York), February, 1927. The attendance was large in the courses in

[1] Industrial Psychology, Hamilton, N. Y., March, 1927, p. 159.

economics, literature (modern drama), social history, and English. A rhythmic dancing course and a course in the appreciation of music were also popular.

Under the auspices of the poetry group there is a weekly supper party at which modern poetry is read. It is hoped that the program of study will be so unified that the students who can attend only once a week will be able to follow two related subjects the same evening; for example, economics and labor dramatics or social history and industrial arts. Students in the latter course will be under the supervision of Department of Industrial Arts at Teachers' College.

Two representatives from each of the classes constitute the student council which holds a monthly conference for the discussion of class administration.

National Canadian Conference on Technical Education [1]

THE second national conference on technical education was held in Ottawa, February 9 to 11, 1926, at the invitation of the Minister of Labor. The educational department of every Province was represented.

Various vocational education problems were taken up, especially those concerning the distribution and administration of the Dominion Government grants under the technical education act. Among the outstanding subjects of discussions were—

1. The purpose and aims of vocational courses in secondary schools.
2. The relation between vocational schools and industry.
3. The scope and limitations of vocational work on which Federal grants are paid.

The first conference of this character called by the Canadian Department of Labor met in October, 1920, shortly after the passage of the technical education act under which the Dominion Government votes each year the sum of $1,000,000 for the promotion of vocational education in the different Provinces. Allotments are made to the Provinces on a population basis and are "paid in the form of grants equaling the sum expended by each provincial government on vocational education of less than college grade."

[1] Labor Gazette, Ottawa, February, 1927, p. 184.

TRAINING AND PLACEMENT OF THE HANDICAPPED

Utilization of Disabled Workers in Industry

THE waste of human material in industry has as yet received little consideration as compared with the attention given to the elimination of waste in the use of space or materials in the construction of factory buildings and in the proper use of machinery.

In a discussion of the possibility of adapting disabled workers to industrial tasks in an article in the Rehabilitation Review,[1] it is pointed out that while in the building and development of a great industrial plant every care is exercised to plan for the most economical operation consistent with safety and maximum production in hiring the workers in such a plant it is the usual policy to reject workers who suffer from any physical handicap even though they are otherwise physically sound. Tasks which could be performed by one-armed or one-legged workers are not given to such workers who may apply for them although nowhere in the plant, for example, is a 10-horsepower motor installed where a 5-horsepower is adequate.

If tasks which could be suitably performed by persons with physical handicaps were properly classified and made available to such persons, the potential supply of able-bodied labor would be increased, a factor which is going to be of increasing importance with the present policy of restricted immigration.

In view of the large number of industrial accidents which result in amputations and definite mutilations and therefore in some form of permanent disability, it is important that the same careful study should be given to the problem of adapting these workers to industrial employment as is given to the planning of the buildings and the mechanical equipment. If every job in a plant were listed and defined as to what physical capabilities other than actual skill were required, for the guidance of the employment division, it would be possible to employ handicapped persons who were otherwise suited to the tasks and who were approved by the plant physician.

Although workmen's compensation provides definite awards for such injuries as the loss of arms, legs, hands, feet, and eyes, these awards will not maintain the individual during the remainder of average life expectancy, and reemployment, therefore, is absolutely essential if he is to be saved from the danger of enforced idleness and dependency.

It has been shown that a worker who has sustained the loss of one arm or one leg, rarely loses another member by amputation from accident and the placement of such workers in suitable occupations does not involve, therefore, any special risk of increased compensation costs. Such workers placed in suitable employment are said usually to be steady, dependable workers and as such are an asset to the plant.

[1] Rehabilitation Review, New York, January, 1927, pp. 27–29. "Utilization of disabled workers in suitable tasks in industry as based on definite engineering principles," by S. S. Riddle.

"It will probably not be many years," the writer says, "before every large manufacturing and public-utility corporation, employing great numbers of workers in hazardous processes, will have the human operating tasks analyzed and card indexed from the physical-requirement standpoint, and workers, even though physically disabled, if otherwise qualified, will be employed with the same engineering skill and foresight as to-day guide the structural engineer in his selection of size and character of materials and the mechanical engineer in his design of operating equipment."

Training and Placement of the Deaf in Minnesota [1]

THE Minnesota division of the deaf began its work, August 1, 1915, as one of the agencies of the State department of labor and industries and upon the creation of the State industrial commission in 1921, became one of the divisions of that constituted body.

The State law (secs. 4084, 4085, and 4086, G. S. 1923) provides that this division shall make special effort to look after the general welfare of the deaf in all parts of Minnesota, "ascertain what trades or occupations are most suitable for them and best adapted to promote their interest, and aid them in securing such employment as they may be fitted to engage in." It is further provided by the law that statistics concerning this work must be gathered and compiled.

The division's records for the fiscal years 1924–25 and 1925–26 show progress in all branches of service. This is particularly the case in regard to employment conditions.

According to the commission's report more and more employers are being convinced of the truth of the division's reiterated contention that in various industries deafness does not seriously handicap efficiency. In fact some employers agree that a deaf employee once placed at work calling for constant application, with few or no interruptions for directions, will accomplish more than the average normal worker.

This deduction is quite logical as the deaf worker is conscious of his difficulties in carrying on conversation and therefore "loses none of his own time or that of other employees during working hours." If the deaf employee is also careful and energetic he desires to prove that his physical defect does not interfere with the quantity and quality of his production or take away his ambition.

There are certain employers who are positively opposed to placing deaf persons on the pay roll. The division hopes to overcome this prejudice by bringing to bear upon it the successful experience of other employers with this class of workers.

On many occasions the superintendent of this division (who, by the way, is the only person at present employed) must act as a buffer between employer and employee, so far as selling the service of the deaf worker is concerned. This sometimes requires finesse, especially when dealing with the recalcitrant applicant for employment and the really few prejudiced employers.

The deaf population of the State is estimated at about 2,000, of whom 1,554 are listed by the division. Many of the deaf object to reporting their defect, which makes complete registration difficult.

[1] Unless otherwise specified the data in this article are taken from the Third Biennial Report of the Industrial Commission of Minnesota, July 1, 1924, to June 30, 1926. Minneapolis, 1927. pp. 185–191.

Placement of the Deaf

THE public employment office under the State industrial commission has given valuable aid in the placement of the deaf and the legal department of the commission has rendered important service to the division especially through legal advice given to the deaf.

Training for deaf persons has been secured through appreciated cooperation of the department of reeducation. Such training included mechanical drafting, dressmaking, comptometer operating, Elliot-Fischer machine operating, typing, bookkeeping, furniture finishing, tailoring, linotype operating, and lip reading. Positions were also open for brush makers, optical mechanics, dental supply mechanics, fur workers, milliners, and a laboratory assistant in a hospital, but at the time none of the applicants for employment could qualify for these positions. Certain classes of factory work which pay the highest wages seem to appeal to most boys and girls seeking employment as beginners. Pleading with them to learn a trade of some kind, with greater future possibilities, even though at a lesser wage, is given scant consideration by these workers.

For the biennium under review, 1,324 calls were made, 1,047 of which related to employment. The remaining 277 were made at homes, schools, court, and other places and were not in reference to employment. Often the division is requested to supply an interpreter for inspection of industrial plants, in court proceedings, at funerals, etc., and numerous deaf travelers call at the office to get information on their way to various sections of the Northwest.

During the biennium 211 deaf persons—112 men and 99 women—applied for employment. The occupational distribution of the 125 who were placed is given below:

Carpenter	1	Janitor	1
Bakery	4	Housework	4
Farm hands	8	Clerical	5
Addressing envelopes	1	Bookbindery	2
Sewing	2	Typing	2
Shipping room	1	Press feeding	2
Warehouse	1	Elliot-Fischer operators	2
Printing	4	Metal plating	1
Leather manufacturing	1	Filing	1
Cabinet finisher	1	Packers	3
Repairer	1	Labeling	2
Linotype operator	1	Novelty manufacturing	1
Candy factories	9	Furniture finisher	1
Laundry	3	Mending	1
Factory	14	Tailoring	2
Laborers	12	Comptometer operating	1
Painting	3	Pressing	1
Ironer	1	Comptometer and biller	1
Cabinetmakers	8	Folding	1
Helpers	4	Order filler	1
Dishwashing	3	Power-machine operators	7

Age Distribution of Deaf Persons

THE age distribution of 591 deaf persons for whom age was reported was as follows:

Over 5 years and under 10	31	Over 50 years and under 55	24
Over 10 years and under 15	63	Over 55 years and under 60	32
Over 15 years and under 20	66	Over 60 years and under 65	20
Over 20 years and under 25	66	Over 65 years and under 70	15
Over 25 years and under 30	53	Over 70 years and under 75	6
Over 30 years and under 35	61	Over 75 years and under 80	4
Over 35 years and under 40	35		
Over 40 years and under 45	67	Total	591
Over 45 years and under 50	48		

An analysis of the causes of deafness in 562 persons showed that 157 were deaf from birth and that among the other most frequent causes were meningitis, scarlet fever, brain fever, whooping cough, typhoid fever, and measles.

Education of the Deaf

REPORTS received by the division showed that 351 persons were educated in State schools for the deaf and 9 in day schools for the deaf, 56 in public schools, 7 in private schools, 8 in vocational schools, 13 in business colleges, 2 in art schools, 2 in normal schools, 16 in colleges, 4 in universities, and 18 in foreign countries.

There is a State school for the deaf in Faribault, which was attended last year by 274 pupils. Both lip reading and the sign language are taught in this institution, and its pupils may learn baking, domestic science, tailoring, printing, cabinetmaking, auto repairing, and typing. There are also special classes for the deaf in St. Paul, Minneapolis, Duluth, and Rochester. The total attendance for these four cities was 132.

An examination of the vocations selected by 369 deaf graduates in 1925–1926 showed that the most popular of these vocations were domestic science, printing, cabinetmaking, shoemaking, carpentry, baking, and tailoring.

Age at Which Hearing Was Lost

FIGURES as to age when hearing was lost show that out of 585 for whom this information was reported, 26.8 per cent were deaf from birth and 54.7 from 1, 2, 3, 4, and 5 years of age.

A list of 332 employed deaf, which is published in the report of the division, included over 100 occupations.

LABOR LAWS AND COURT DECISIONS

International Labor Office: Regulations Incidentally Affecting Personal Work of Employers

THE September, 1926, issue of Official Bulletin of the International Labor Office (Vol. XI, No. 5), is chiefly devoted to a discussion of the question of the competence of the International Labor Organization "to draw up and propose labor legislation which, in order to protect certain classes of workers, also regulates incidentally the same work when performed by the employer himself."

It seems clear that the question arose largely in connection with the regulation of bakeries and specifically of night work therein. A full and interesting discussion of the whole question, however, was entered upon, the topic of employment in bakeries not being "specifically considered by the court for the purpose of the present opinion, except by way of illustration." Some 150 pages are given to a presentation of the proceedings, arguments, and conclusions. As stated, "the question put to the court has been argued before it both in writing and orally, and the discussions, especially in the written documents, cover a wide range of topics, including national sovereignty, individual liberty, and various controversial theories of society and government."

Various provisions of the Treaty of Versailles were considered, reaching the conclusion that "the high contracting parties clearly intended to give the International Labor Organization a very broad power of cooperating with them in respect of measures to be taken in order to assure humane conditions of labor and the protection of workers." Reference was made to action already taken affecting employers as well as employees as regards the regulation of the hours of work and the adoption of a weekly rest period of at least 24 hours, which shall include Sunday wherever practicable. The common practice of requiring the closing of shops, factories, and places of business within certain hours of the day or on certain days of the week was also referred to, such steps resulting in "suspending and regulating the particular kind of work, whether performed by the employer or by the employed." A second reference is to the international convention of 1906 as to the use of white phosphorus in the manufacture of matches. Though the point was debated, it was decided that this measure might be regarded as falling within the sphere of labor legislation, and affecting workers of both the employer and the employee class. The same conclusion was reached with regard to the convention concerning the use of white lead in painting.

The final conclusion reached was that the organization had the power indicated, the opinion being in the following language:

> That it is within the competence of the International Labor Organization to draw up and to propose labor legislation which, in order to protect certain classes of workers, also regulates incidentally the same work when performed by the employer himself.

Watches and Wages of Seamen

THE necessity of judicial construction for the interpretation and application of laws is effectively illustrated by a case recently before the courts, commencing as early as 1924. The case in question (O'Hara *v.* Luckenbach S. S. Co.) arose in the District Court of the United States in San Francisco, Calif. The statute involved was the seamen's act (the so-called La Follette Act of March 4, 1915, 38 Stat. 1164), providing for the division of ship's crews into watches, at least three, "which shall be kept on duty successively for the performance of ordinary work incident to the sailing and management of the vessel." This provision applies to firemen, oilers, and water tenders, the sailors to be divided into at least two watches.

In the instant case, William O'Hara and another were two of the three quartermasters, on the steamship Lewis Luckenbach, charged with the duty of steering the vessel. There were 13 seamen on board, of whom the three quartermasters and three others assigned to watch duty were divided into watches or shifts of eight hours each; the other seven men did general ship's work for eight hours daily and then went off duty. The two complaining quartermasters demanded their discharge, with wages due, without completing their contract, on the ground that the statute had not been complied with by reason of the failure to assign all the seamen to one or the other of the watches described. The district court did not regard the demand for discharge as based on sufficient cause, and entered a decree in favor of the steamship company, holding it not liable for the wages demanded. On appeal, the circuit court of appeals for the ninth circuit adopted this view (1924; 1 Fed. (2d) 923). The act in question was construed as having for its primary object the fixing of hours of service and the prevention of overwork, not to prescribe the number of men in each watch. The safety of the ship was to be secured by the selection of qualified men to steer and keep lookout, but that all the crew should be placed on duty was held not to be required by the act, and a failure to do so was no basis for demanding the discharge.

The case then went to the Supreme Court on a writ of certiorari, where the courts below were reversed, the court holding that the general purpose of the act was not only to safeguard the welfare of the seamen as workmen, but also "to promote safety at sea," as set forth in the act. That the law was not primarily a regulation of working hours is suggested by the omission from its terms of those employed in the steward's department, for instance, while designating sailors, firemen, oilers, and water tenders as subject to its terms. The court reached the conclusion that there was an evident purpose "to compel a division of the men for duty on deck and in the fireroom, and continuity of service, to the end that in those departments the ship should at all times be actively manned with equal efficiency." While it might seem superfluous at times to have all the members thus distributed, an emergency might occur demonstrating the importance of "immediate and wakeful readiness for action."

The court was therefore of opinion that the act had been violated, so that the decree dismissing the action for wages must be reversed. (Jan. 4, 1926; 46 Sup. Ct. 157.)

The next step in this case was an effort by the libelants to recover not only the wages claimed, but penalties for nonpayment under the terms of the act that permit a recovery of "a sum equal to two day's pay for each and every day during which payment is delayed." (Seamen's act, sec. 3.) This penalty applies if the refusal to pay is "without sufficient cause," and the district court held that the question litigated in the former proceedings was a doubtful one, so that the employer should not be penalized for his construction of it, even though it was rejected by the Supreme Court. The provision for penalties was therefore stricken out and a decree entered simply for the amount of wages claimed, with interest and costs.

Appeal was again taken to the circuit court of appeals, where the judgment below was affirmed. (Dec. 13, 1926; 16 Fed. (2d) 681.) The right to obtain double wages was said to be dependent on the proper construction of the provisions of the law fixing watches; and as the controversy with respect to the construction of this statute "was carried on in good faith," the master had a right to have it adjudicated, and the mere fact that the Supreme Court held the courts below to have been mistaken in sustaining the employer's contention "is not by itself a valid reason for holding that there was not sufficient cause for refusal to make payment demanded by the men." Cases were cited in support of this position and the judgment granting wages and costs without penalty was affirmed.

INDUSTRIAL DISPUTES

Strikes and Lockouts in the United States, February, 1927

STRIKES and lockouts in the United States beginning in the month of February, 1927, in so far as reports thereof have been received by the bureau are shown in this article. Disputes involving fewer than six workers and those lasting less than one day have been omitted where information on this point is reported.

In presenting these figures it is important to note that the bureau has no machinery for the prompt and full reporting of strikes and lockouts, but depends largely upon newspapers, trade journals, and labor periodicals for the preliminary reports of disputes. These preliminary reports are then followed up by correspondence, and any necessary revision is made. For the reasons mentioned, the data here presented do not pretend to be absolutely complete or fully accurate. It is believed, however, that practically all of the more significant strikes and lockouts are recorded, and that the information presented is sufficiently accurate to give a fair picture of the situation in the United States in the matter of strikes and lockouts.

The Bureau of Labor Statistics solicits the cooperation of employers, labor organizations, and other interested parties in making this compilation of industrial disputes as comprehensive and as accurate as possible.

Strikes and Lockouts Beginning in February, 1927

THE table following shows the number of strikes and lockouts beginning in February, 1927, in comparison with December and January, and also the number of persons involved, to the extent that reports on this point have been received:

STRIKES AND LOCKOUTS BEGINNING IN DECEMBER, 1926, AND IN JANUARY AND FEBRUARY, 1927

Months	Number of strikes and lockouts [1]	Disputes in which number of employees directly involved is known		
		Number of strikes and lockouts	Number of employees involved	Average number of employees per dispute
December, 1926	33	23	9,712	422
January, 1927	46	37	4,983	135
February, 1927 [2]	60	44	8,762	199

[1] Excluding those involving fewer than 6 persons. [2] Data given are subject to revision.

Classification of Strikes and Lockouts by Industries and by Number of Persons Involved

THE statement below shows the distribution of the reported strikes and lockouts beginning in February, 1927, by industries

	Number of disputes
Building trades	11
Lumber	1
Clothing industry	15
Furniture	5
Mining, coal	4
Chauffeurs and teamsters	4
Textile industry	5
Printing and publishing	1
Miscellaneous	14
Total	60

So far as information is available, the disputes beginning in February, 1927, classified by number of workers directly involved, are as follows:

	Number of disputes
6 and under 20 workers	10
20 and under 100 workers	19
100 and under 500 workers	11
500 and under 1,000 workers	1
1,000 and under 5,000 workers	3
Total	44

Principal Strikes and Lockouts Beginning in February, 1927

SHINGLE mill workers, Washington.—According to press reports, a strike of sawyers and packers in a shingle mill at Montesano began the night of February 1 and by February 4 had spread to other plants at Grays Harbor so as to involve about 15 mills. It grew out of a wage reduction of 2 cents per thousand for sawyers and 3 cents per thousand for packers. The number of strikers is not definitely known, but 1,000 men are said to be idle because of the trouble. This strike is reported to have terminated successfully on March 11.

Coal miners, Pennsylvania.—The operations of the Lehigh Valley Coal Co. were interrupted between February 4 and 11 by a strike of 705 miners in their Henry Colliery at Plains because of a "dispute over bottom rock rate in bottom 5-foot vein." Other employees of the company in the Wyoming Valley, to the number of 2,041 went out on February 8, in sympathy with the Henry Colliery strikers, involving the Broadwell, Maltby, Westmoreland, Prospect, and William A. mines and Midvale shops. This sympathy "outlaw" strike was called by the general grievance committee, which also called it off on February 10, after representatives of the committee had consulted with district officers of the United Mine Workers of America. The men resumed work, it is understood, in all the mines named on February 12 under conditions prevailing prior to the difficulty.

Principal Strikes Continuing Into February, 1927

SILK underwear makers, New Jersey.—About 350 female employees, of Garfinkle & Ritter, Paterson, manufacturers of silk underwear, struck on January 19 against a reduction in wages, and according to press reports they returned to work on February 18, pending a readjustment, after a conference between a committee of strikers and members of the firm.

Conciliation Work of the Department of Labor in February, 1927

By HUGH L. KERWIN, DIRECTOR OF CONCILIATION

THE Secretary of Labor, through the Conciliation Service, exercised his good offices, in connection with 37 labor disputes during February, 1927. These disputes affected a known total of 17,820 employees. The table following shows the name and location of the establishment or industry in which the dispute occurred, the nature of the dispute (whether strike or lockout or controversy not having reached the strike or lockout stage), the craft or trade concerned, the cause of the dispute, its present status, the terms of settlement, the date of beginning and ending, and the number of workers directly and indirectly affected.

On March 1, 1917, there were 54 strikes before the department for settlement, and, in addition, 14 controversies which had not reached the strike stage. The total number of cases pending was 68.

LABOR DISPUTES HANDLED BY THE UNITED STATES DEPARTMENT OF LABOR THROUGH ITS CONCILIATION SERVICE, FEBRUARY, 1927

Company or industry and location	Nature	Craft concerned	Cause of dispute	Present status and terms of settlement	Duration		Men involved	
					Beginning	Ending	Directly	Indirectly
					1926	1927		
Lithographers, Baltimore, Md	Strike	Lithography	Asked closed shop	Pending	Dec. 2		41	60
Delaware Lunch, Wilmington, Del	do	Café work	Alleged violation of agreement.	Unable to adjust. Court proceedings pending.	Nov. 2		46	81
Crescent Foundry, St. Louis, Mo	do	Molding metal		Unclassified. Strike ended before commissioner's arrival.	June 1			
Paper-box manufacturers, New York City.	do	Paper-box industry	Asked improved sanitary conditions.	Adjusted. Conditions improved	Oct. 5	Feb. 10	2,000	
					1927			
Lehigh Valley Coal Co., Duryea, Pa.	do	Mining	Price for work on pillars	Adjusted. Returned; terms fixed by committee.	Jan. 24	Feb. 3	314	
Cluett Peabody Co., Troy, N. Y	do	Shirt pressing	Wages for ironing under new system.	Adjusted. Returned; satisfactory understanding.	Feb. 2	Feb. 4	300	2,500
Lehigh Valley Coal Co., Wilkes-Barre, Pa.	Threatened strike.	Mining	Asked increase on piecework	Adjusted. Returned; settled by local board.	Feb. 8	Feb. 18	4,800	
St. Gabriel's Church, Hazelton, Pa.	Strike	Building labor	Asked wage increase	Unclassified. Employees discharged for intoxication; job completed without them.	Feb. 5	Feb. 5	3	
Bus drivers, Jersey City and Bayonne, N. J.	do	Bus driving	Asked $3 increase, to $45 per week.	Adjusted. Allowed $44 per week; $7.50 per day for extra men; $1 per hour for extra runs.	Feb. 5	Feb. 17	320	25
Lowiki Bake Shop, Pittsburgh, Pa.	do	Baking	Hours and alleged discrimination.	Pending	(1)		12	
Potomac Glass Co., Cumberland, Md.	do	Glass blowing	(1)	do	(1)		100	
Anheuser-Busch (Inc.), St. Louis, Mo.	do	Maintenance labor		Unclassified. Mediation impracticable.			(1)	
Gunning Silk Co., Easton, Pa	do	Silk textile weaving	Installation of machinery with consequent 10 per cent cut.	Adjusted. Former rates reestablished temporarily.	(1)	Feb. 8	60	
Power City Bakery, Hazelton, Pa.	Threatened strike.	Baking industry	Alleged violation of agreement; payment of union dues.	Adjusted. Dues paid by union members.	Feb. 9	Feb. 23	50	
Shingle weavers, Grays Harbor, Wash.	Strike	Shingle weaving	Wages cut on an average of 75 cents per day.	Pending	Feb. 11		1,000	
John R. Evans, Camden, N. J	do	Leather glazing	Alleged discrimination for union affiliation; 3 discharged.	Adjusted. Men reinstated with mild reprimand.	Feb. 17	Feb. 24	80	600
Hazelton Baking Co., Hazelton, Pa.	Lockout	Baking industry	Repudiation of seniority clause by company.	Adjusted. Satisfactorily compromised.	Feb. 13	Feb. 26	75	
	Strike	Upholstering	Employment of nonunion stockholder in company.	Adjusted. Arbitrator held that stockholder could not be employed unless	Jan. 11	Feb. 1	18	790

Enterprise Upholstering Co., Boston, Mass.	Strike	Upholstering	Employment of nonunion stockholder in company.	Adjusted. Arbitrator held that stockholder could not be employed unless union member.	Jan. 11	Feb. 1	18	790
Oswego Rayon Plant, Oswego, N. Y.	do	Rayon industry	Wage cut of 10 per cent	Unclassified. Misunderstanding explained by company. No wage cut.	Feb. 2	Feb. 17	30	195
National Fireproofing Co., Cleveland, Ohio.	do	Building labor and carpenter work.	Jurisdiction of carpenter work.	Pending	Feb. 6		66	
Riesman, Rothman & Beiri, New York City.	Controversy	Garment industry	Discharge of 6 workers with whom employees refused to work.	Unclassified. Plant in full operation	Jan. 21	Feb. 16	180	
Upholsterers, Los Angeles, Calif.	Strike	Upholstering	Alleged violation of agreement; wages for job work.	Pending	Jan. 26		45	20
Midwest Cap Works, Denver, Colo.	Threatened strike.	Cap making	Wages, hours, and conditions	Adjusted. Allowed 7 per cent increase; hours the same as before.	Feb. 11	Feb. 14	42	
Taxi drivers, Rochester, N. Y.	Strike	Taxi driving	Asked increase and union recognition.	Pending	Feb. 16		75	150
Oil and gas workers, Ohio	Controversy	Oil and gas well work.	Alleged discharges for union affiliation.	do	Feb. 17		1,000	
Post and Sheldon Silk Co., Allentown, Pa.	Strike	Silk textile crafts	Asked restoration of 1½ cents per yard wage cut.	Adjusted. Returned on bonus basis	Feb. 15	Feb. 23	80	90
Stackhouse Coal Co., Shickshinny, Pa.	do	Mining	Company opposed unionization.	Adjusted. Settled in conference of officials.	Feb. 1	Feb. 23	160	5
Courthouse building, Miami, Fla.	do	Building	Working conditions	Pending	Feb. 2		15	100
Lexington Utilities Co., Lexington, Ky.	Controversy	Street railways	Discharge of 3 men	Adjusted. One man reinstated; two others employed elsewhere.	Feb. 3	Feb. 21	80	
Plumbers, Tampa, Fla.	Threatened strike.	Plumbing	Reduction of wages	Pending	Feb. 1		20	118
Diamond State Fiber Co., Bridgeport, Pa.	Controversy	Fiber work	Workers object to rulings of efficiency expert.	Unable to adjust. Company will make no change.	(1)	Feb. 25	15	
Bennett Mill, North Adams, Mass.	Strike	Spinners	Change in wages and working conditions.	Pending	Feb. 15		116	300
Stecker Shop, Cleveland, Ohio	do	Headwear industry	Asked for union recognition.	Pending. Property destroyed by strikers; company demands payment.	Feb. 7		8	
Fur workers, New York City and Brooklyn, N. Y.	do	Fur industry	Companies refused union recognition to chauffeurs.	Unclassified. Union ordered strikers to return, claiming strike in violation of agreement.	Feb. 17	Feb. 21	400	100
Gurak Fur Shop, Philadelphia, Pa.	do	do	Alleged violation of agreement in reducing force.	Unable to adjust. Firm discontinued making their own garments.	Feb. 21	Mar. 1	25	
Structural-iron workers, steam fitters, and cement finishers, Pittsburgh, Pa.	do	Building	Wages and 5-day week	Adjusted. Returned on 1926 scale; 3-year agreement concluded.	Feb. 27	Mar. 9	950	200
Sil Cher Cap Co., Baltimore, Md.	do	Cap making	Asked for wage increase	Adjusted. Allowed increase, $2.50 per week, and 40-hour week.	Feb. 7	Feb. 7	10	
Total							12,536	5,284

[1] Not reported.

Strikes and Lockouts in Canada, 1926

THE statistics in the table below on strikes and lockouts in Canada during the period 1913 to 1926, are taken from the February, 1927, issue of the Canadian Labor Gazette.

STRIKES AND LOCKOUTS IN CANADA, 1913 TO 1926

Year	Number of disputes		Disputes in progress during year		
	In progress each year	Beginning in each year	Employers involved	Employees involved	Time loss in working-days
1913	113	106	1,015	39,536	1,287,678
1914	44	40	205	8,678	430,054
1915	43	38	96	9,140	106,149
1916	75	74	271	21,157	208,277
1917	148	141	714	48,329	1,134,970
1918	196	191	766	68,489	763,341
1919	298	290	1,913	138,988	3,942,189
1920	285	272	1,273	52,150	886,754
1921	145	138	907	22,930	956,461
1922	85	70	569	41,050	1,975,276
1923	91	77	419	32,868	768,494
1924	73	63	415	32,494	1,770,825
1925	83	81	510	25,796	1,743,906
1926	77	73	598	24,142	296,811

The principal disputes in 1926 involved establishments manufacturing clothing and boots and shoes. Nearly two-thirds of the loss in working-days for that year occurred in these two industries.

One of these controversies involved 3,000 employees in a Quebec shoe factory and caused a loss of 88,677 working-days, while another involved 5,000 employees among the men's clothing factory workers of Montreal. A loss of 30,400 working-days is reported for 700 employees in the Port Arthur (Ontario) lumber industry. There were 20 disputes in coal mining, some of which affected large numbers of miners. These controversies, however, were terminated in a few days.

Strikes in Japan, 1926 [1]

IN 1926 there were 1,005 labor disputes in Japan, according to a report of the Social Work Bureau of the Home Office of that country. These disputes outnumbered those of the preceding year by 200. The controversies of 1926 involved 100,000 laborers, an increase of 10,000 over 1925. The causes of these industrial difficulties were classified as follows: Demand for higher wages, 271; opposition to decrease in wages, 89; demand for fixing definite discharge allowances, 181. Almost all of these disputes were adjusted by compromise, only 2 per cent of the demands being accepted without some changes and only 3 per cent of the demands being withdrawn without modification of the original terms under which the workers had been employed.

[1] Trans-Pacific, Tokyo, Jan. 1, 1927, p. 15.

The business depression is said to be reflected in the increase of labor disputes. Capitalists have been reducing wages to a point where laborers no longer can stand further reduction or even get along with the present low rates.

Labor-union workers have been also partly responsible for boosting the number of disputes, it is said. Labor unions suffered setbacks and in order to expand their influence, labor disputes were used as the vehicles for their personal interest.

The more systematic management of disputes this year and the longer duration of most of them are reported as due to the progress of the labor movement. Certain of these strikes, however, came to a very sudden end.

Some of the longest strikes involved the following companies and lasted the number of days specified:

	Days
Japan Music Co. at Hamamatsu	105
Asia Confectionery Co. of Nagoya	99
Toyoda Weaving Co. of Osaka	92
Mitsubishi Warehouse Co. of Kobe	91
Kyodo Printing Co. of Tokyo	67

It is reported that the act for the conciliation of labor disputes, which became effective July 1, 1926,[2] has been found of value.

[2] See Labor Review, Washington, November, 1926, pp. 90, 91.

LABOR ORGANIZATIONS

Degree of Organization of Miners in Foreign Countries

THE data given below regarding the degree of organization of mine workers in various foreign countries are taken from a memorandum prepared by the International Labor Office under date of November 6, 1926, in reply to a request of the United States commercial attaché at Paris. Concerning the accuracy of the data, the memorandum says:

The following notes give for Germany, France, Belgium, Spain, Poland, Netherlands, Australia, South Africa, and New Zealand the latest information available as to the membership of mine workers' organizations and as to the total number of mine workers. Owing to differences in the scope of these figures and the different methods by which they are compiled, it is difficult to obtain more than an approximate idea of the extent to which mine workers are organized in different countries.

In the first place, the method of estimating the number of workers employed is not uniform in the different countries. In some cases the figures are based on an average of the numbers employed at different dates, or the numbers on the colliery books; in some cases they are based on the number of shifts worked (full-time workers, etc.). The membership of trade-unions is also compiled in different ways, and the degree of accuracy of the figures varies considerably. In some cases, only members who have paid their subscriptions for the current period are included, while in other cases, persons are counted as members who have not paid their regular subscription.

Moreover, although it is no doubt the case that miners usually form their own craft unions, yet in some cases the unskilled laborers are members of other unions such as "general laborers' union" and on the other hand certain specialized or highly skilled workers (e. g., mechanics, enginemen, etc.) are sometimes members of machinists' or engineering unions.

Again, figures for a whole country often obscure differences which exist in different parts of the country. The mining industry is localized in different regions and conditions are often very different from one region to another. In Germany, for example, the miners of the Ruhr are very highly organized, while the miners of the Upper Silesia are only organized to a much less degree. Separate figures are not available for different regions but the figures for the country as a whole may not necessarily give a correct impression.

It should also be noticed that the figures of the total number of workers do not always relate to same data as the figures for the number of organized workers.

Germany [1]

Membership of the two miners' unions at end of 1924:	
Verband des Bergarbeiter Deutschlands (affiliated to General Federation of Trade Unions)	190, 224
Gerwerkverein Christlicher Bergarbeiter (affiliated to Federation of Christian Trade Unions)	134, 241
Total	324, 465
Average number of workers employed (i. e. number of insured workers in undertakings employing more than 10 workers) during 1924:	
Hard coal	558, 938
Lignite	93, 713
Copper and arsenic	13, 132
Lead, silver, zinc	10, 549
Iron	17, 706
Total	676, 332

[1] Sources: International Labor Directory, 1925, Pt. III; and Vierteljahrshefte zur Statistik des Deutschen Reichs, 1925, Heft IV.

France [2]

Membership of the three organizations of mine workers in 1924:	
Fédération Nationale des Travailleurs du Sous-sol et Similaires	90, 650
"Sous-sol" (*Confédération générale du Travail unitairie*)	40, 000
Fédération française des Syndicats professionels des Mineurs (Chrétien)	9, 000
Total	139, 650
Average number employed during December, 1925:	
Coal mines	309, 782
Iron mines	29, 456
Total	339, 238

Belgium [3]

Membership of the two miners' trade-unions at the end of 1924:	
Centrale Syndicale Nationale des Travailleurs de l'Industrie des Mines	74, 954
Centrale des Francs-Mineurs (Chrétien)	6, 683
Total	81, 737
Estimated number of workers employed during 1924:	
Coal mines	172, 285
Metal mines	161
Iron ore	143
Total	172, 589

Spain [4]

Membership of the miners' association (*Federación Nacional de Obreros Mineros*) affiliated to General Federation of Spanish Workers (*Union General de Trabajadores*) in 1924	24, 073
Average number of workers employed in all mines during 1923:	
Coal	48, 828
Iron	11, 224
Lead	11, 917
Copper	8, 324
Other	9, 693
Total	89, 986

Poland [5]

Membership of miners' unions in 1924:	
Miners' union affiliated to Federation of Trade-Unions in Poland	13, 804
Miners' union affiliated to Federation of Polish Trade Unions	89, 564
Miners and smelters affiliated to Federation of Christian Trade Unions	11, 300
Mineral workers affiliated to Federation of Christian Trade Unions	1, 951
Total	116, 619
Number employed in mining at the end of 1924:	
Coal	151, 041
Lignite	510
Iron	3, 382
Zinc and lead	8, 889
Total	163, 822

[2] Sources: International Labor Directory, 1925, Pt. III, Workers' organizations; and Bulletin du Ministère du Travail, January–March, 1925.
[3] Sources: International Labor Directory, 1925, Pt. III; and Statistique des Industries extractives et métallurgiques, 1924.
[4] Source: Anuario Estadístico de España, 1923–24.
[5] Sources: International Labor Directory, 1925, Pt. III; and Statistique du Travail, June, 1926.

Netherlands [6]

Membership of mine workers' unions:	
Miners' associations of Roman Catholic Workers' Federation (July, 1925)	3,155
Miners' associations of Dutch Federation of Trade Unions (July, 1925)	1,857
Miners affiliated to National Labor Secretariat (January, 1925)	138
Miners' associations of Dutch General Trade Unions Neutral Federation (January, 1924)	216
Miners' associations of Dutch Federation of Christian Trade Unions	134
Total	5,500
Number of workers employed in coal mines during 1923	26,393

Australia [7]

Total membership of Associations of Mining and Quarrying Workers at the end of 1924	40,996
Average number of workers in mining and quarrying [8] in 1923	54,759

Union of South Africa [9]

Total membership of miners' association, September, 1924:	
National Mine Workers' Associations	320
South African Mine Workers' Union	5,200
Diamond Workers' Union	49
Underground Officials' Associations	1,354
Other unions (5)	4,238
Total	11,161
Average number of Europeans employed in mines, September, 1924:	
Gold	19,659
Diamond	9,581
Coal	1,708
Other	196
Total	[10] 31,144

New Zealand [11]

Total membership of 15 registered mine workers' unions, Dec. 31, 1925	3,215
Average number of persons ordinarily employed at productive and unproductive mines during 1924:	
Gold	2,026
Metal	1,858
Coal	4,869
Total	8,753

[6] Sources: International Labor Directory, 1925, Pt. III; Annuaire Statistique des Pays Bas, 1924-25.
[7] Sources: Annual reports of Labor and Industrial Branch, 1924 and 1925; Official Year Book of the Commonwealth of Australia, 1925.
[8] Separate figures for mining and quarrying not available.
[9] Sources: International Labor Directory, 1925, Pt. III; and Monthly Bulletin of Union Statistics, September and December, 1924.
[10] Not including 273,639 unorganized non-European workers (Asiatics, natives, etc.).
[11] Sources: Report of the Department of Labor, New Zealand; and New Zealand Official Year Book, 1926.

WAGES AND HOURS OF LABOR

Estimated Income of the People of the United States

THE National Bureau of Economic Research (Inc.) has recently issued a statement of the estimated "current income" of the people of the United States, by years, from 1922 to 1926, inclusive, thus supplementing its earlier estimates for the years 1909 to 1921.

Subject to the reservations made below, these figures indicate that the total current income of the people of the United States in 1926 was approximately $90,000,000,000, or 40 per cent higher than in 1921, and that the per capita income in 1926 was approximately $770, or 33 per cent greater than in 1921. These increases between 1921 and 1926, moreover, must have represented real increases in income, as prices were not higher in 1926 than they were in 1921.

In using these estimates the National Bureau of Economic Research makes the following cautionary statements regarding the possibility of error in the figures for the years 1921 to 1926:

> The income estimates for the years 1909 to 1921, already published by the National Bureau, are composed of several thousand separate items and are arrived at by means of complicated and laborious computations. Because of the limited number of workers available for this study and the amount of work involved, it has proved impracticable to complete the estimates until a considerable period has elapsed after the publication by the United States Bureau of Internal Revenue of the volume entitled "Statistics of Income," and this volume does not appear until many months after the income tax schedules are filed.
>
> The necessary result has been that the careful income estimates of the National Bureau have appeared several years late, and it is this retardation which has given rise to the demand for current estimates.
>
> The preliminary figures which are here presented for years since 1921 are based upon a limited number of indicators consisting of such items as wage rates, numbers of employees, dividend and interest payments, and volume of trade. For the years 1922, 1923, and 1924, the income tax reports are available and the figures in those have been utilized as fully as possible. It is by no means certain that these indices constitute reliable gauges of the variations in income. It is possible, therefore, that the figures presented for the year 1926 may be as much as 10 per cent in error, but the probabilities are that the error is not as great as that. The chances of error increase with the distance from the year 1921. All users of the figures here presented should keep in mind the necessary shortcomings of preliminary estimates of this type.

Total Current Income

THE estimates of current income for each of the years 1909 to 1926 are given in Table 1, the first column showing the estimated actual money income and the second column showing the computed purchasing value of such income in terms of the 1913 dollar. The estimated amounts in terms of the purchasing power of 1913 were obtained by dividing the current income figures by index numbers representing the average prices of goods purchased by consumers—in other words, they represent the total amount of direct or consumption goods which the people could have purchased for their entire current income if they had spent it all for such commodities or services. The term "current income" is defined "the excess of cash receipts over business expenses, plus the money value of income

received in the form of commodities." It is estimated by adding (1) wages, salaries and pensions, (2) profits withdrawn from business, (3) dividends, interest, and rent received by individuals, (4) the rental value of homes occupied by their owners, (5) interest upon the sums invested in household furnishings, clothing, and the like, and (6) the value of commodities which families produce for their own consumption. Attention is called to the fact that the term "current income" as thus interpreted "does not include the savings of business enterprise. It may well be, therefore, that the figure for total income would run materially higher throughout."

TABLE 1.—TOTAL CURRENT INCOME OF PEOPLE OF UNITED STATES

Year	Current dollars	1913 dollars	Year	Current dollars	1913 dollars
1909	27, 100, 000, 000	28, 200, 000, 000	1918	56, 000, 000, 000	35, 500, 000, 000
1910	28, 400, 000, 000	29, 100, 000, 000	1919	67, 254, 000, 000	37, 600, 000, 000
1911	29, 000, 000, 000	29, 300, 000, 000	1920	74, 158, 000, 000	36, 300, 000, 000
1912	30, 600, 000, 000	30, 800, 000, 000	1921	62, 736, 000, 000	36, 200, 000, 000
1913	32, 000, 000, 000	32, 000, 000, 000	1922	[1] 65,567,000,000	[1] 40, 400, 000, 000
1914	31, 600, 000, 000	31, 300, 000, 000	1923	[1] 76,769,000,000	[1] 46, 900, 000, 000
1915	32, 700, 000, 000	32, 000, 000, 000	1924	[1] 79,365,000,000	[1] 48, 400, 000, 000
1916	39, 200, 000, 000	35, 500, 000, 000	1925	[1] 86,461,000,000	[1] 51, 100, 000, 000
1917	48, 500, 000, 000	37, 300, 000, 000	1926	[1] 89,682,000,000	[1] 52, 900, 000, 000

[1] Preliminary estimate.

Per Capita Income

TABLE 2 reduces the total income figures to a per capita basis. In commenting on this table the statement of the National Bureau of Economic Research says:

The figures become much more significant when they are reduced to a per capita basis. It appears that, in 1926, the average inhabitant of the United States had an income of $770 or one-third more than in 1921. When this per capita income is expressed in dollars having the purchasing power which they possessed in 1913, we find that the increase has been about 36 per cent. It appears, then, that from the economic point of view, the condition of the average inhabitant has been improving at a rate of about 7 per cent per annum.

The startling nature of this change is indicated by the fact that the annual increase since 1921 has been as great as the entire increase during the 12 years from 1909 to 1921. The fact should be noted, however, that the difference in slope is partially accounted for by the fact that 1921 was a year of depression, while 1926 has been one of unusual prosperity. A fairer comparison may be made by dividing the entire period into two parts—1909 to 1917 and 1917 to 1926.

During the first period of eight years the per capita income, in terms of 1913 dollars, increased 15 per cent, while during the last nine years it increased 26 per cent. If the preliminary estimates are correct, there has, then, been a sharp upward turn in the trend of economic welfare in the United States.

TABLE 2.—ESTIMATED CURRENT INCOME PER CAPITA

Year	Current dollars	1913 dollars	Year	Current dollars	1913 dollars
1909	299	312	1918	537	340
1910	307	315	1919	640	358
1911	309	312	1920	697	341
1912	321	323	1921	579	334
1913	329	329	1922	[1] 597	[1] 369
1914	320	316	1923	[1] 689	[1] 421
1915	326	319	1924	[1] 700	[1] 426
1916	385	349	1925	[1] 752	[1] 445
1917	470	361	1926	[1] 770	[1] 455

[1] Preliminary estimate.

Income per Person Gainfully Employed

TABLE 3 reduces the total income data to the basis of income per person gainfully employed. It is estimated that in 1926 there were some 44,600,000 inhabitants of the United States "gainfully employed" as the term is employed by the United States Bureau of the Census—i. e., employers, employees, and those working on their own account. Housewives and women and children helping the head of the family on the home farm are not included.

Commenting on this table, the statement says:

> For every person gainfully occupied in 1926, there appears to have been an income of slightly over $2,000. When reduced to terms of 1913 purchasing power, we find that the average person working for a money income received about one-quarter more for his services than he obtained in 1917, and about 44 per cent more than he could have secured in 1909. The indications are, then, that despite the constantly growing population and the relatively inelastic nature of the supply of natural resources, new inventions and greater skill and organization are still enabling the average inhabitant to progress steadily upward on the scale of economic welfare.

TABLE 3.—INCOME PER PERSON GAINFULLY OCCUPIED

Year	Current dollars	1913 dollars	Year	Current dollars	1913 dollars
1909	791	823	1918	1,386	879
1910	809	829	1919	1,669	934
1911	812	821	1920	1,851	907
1912	844	850	1921	1,537	887
1913	864	864	1922	[1] 1,586	[1] 979
1914	836	828	1923	[1] 1,821	[1] 1,113
1915	861	843	1924	[1] 1,840	[1] 1,121
1916	1,014	919	1925	[1] 1,971	[1] 1,165
1917	1,232	947	1926	[1] 2,010	[1] 1,186

[1] Preliminary estimate.

Wages of Civil Employees Under the United States Naval Establishment, 1927 [1]

IN DECEMBER, 1926, the Navy Department published a schedule of wages covering all civil employees in the Naval Establishment and in the field service of the United States Marine Corps. This schedule became effective January 1, 1927 and is to remain in force the remainder of the calendar year.

The schedule has been very materially abridged both as to occupations and localities for publication by the Bureau of Labor Statistics. It is believed that the abridgement, however, covers most of the items that are of general interest. The rates published are maximum rates. The minimum rate is 10 cents under this maximum rate and there is an intermediate rate 5 cents under the maximum rate.

[1] U. S. Navy Department. Schedule of wages for civil employees under the Naval Establishment for the calendar year 1927. Washington, 1926.

TABLE 1.—RATES OF WAGES PER HOUR IN THE CLOTHING WORKERS' SERVICE

Navy Supply Depot, Brooklyn, N. Y.

Occupation	Rate per hour	Occupation	Rate per hour
Assistant custom cutter	$0.85	Double-needle operator	$0.70
Baster	.85	Dress-coat maker	.95
Bushelman	.80	Finish presser	.95
Canvas maker	.65	Fitter	.85
Chopper	.75	General tailor	.85
Cloth sponger	.75	Head custom cutter	1.35
Clothing examiner	.75	Head buttonhole maker	.80
Coat finisher	.55	Operator (female)	.50
Coat maker	.90	Pocket maker	1.00
Coat operator	1.00	Trimmer	.60
Collar maker	.90	Trouser finisher	.55
Custom cutter	1.25	Trouser maker	.80
Cutting-machine operator	.90	Trouser operator	.90
Cutter and marker	.85	Underpresser	.80
Die-machine operator	.75	Vest maker	.75

Depot of Supplies, United States Marine Corps, Philadelphia, Pa.

Baster	$0.83	Examiner, clothing	$0.73
Coat fitter	.83	Finisher	.40
Coat maker	.90	Operator (female)	.51
Coat operator	.98	Presser	.73
Custom cutter	1.20	Sponger	.51
Cutter	.83	Tailor, first class	.83
Cutter and marker	.83	Tailor, second class	.73
Designer, embroideress	.65	Trimmer	.40
Embroideress	.48		

TABLE 2.—RATES OF WAGES PER HOUR IN THE LABORER, HELPER, AND MECHANICAL SERVICE

Trade or occupation	Boston	New York	Philadelphia	Washington	Norfolk	Charleston	New Orleans	Mare Island	Puget Sound	Great Lakes
Group I										
Laborer, common	$0.55	$0.55	$0.52	[1] $0.52	$0.45	$0.33	$0.34	$0.55	$0.55	$0.56
Group II										
Hammer runner:										
Heavy	.65	.65	.62	.62	.56	.56	------	.66	.66	------
Others	.59	.61	.57	.57	.51	.51	------	.61	.61	------
Helper:										
Blacksmith's—										
Heavy fires	.63	.63	.61	.61	.58	.55	------	.64	.64	------
Other fires	.60	.60	.56	.56	.53	.50	------	.60	.60	------
Boilermaker's	.60	.60	.56	.56	.53	.50	------	.60	.60	------
Coppersmith's	.60	.60	.56	.56	.53	.50	------	.60	.60	------
Electrician's	.62	.62	.58	.58	.55	.50	------	.62	.62	.60
Flange turner's	.63	.63	.61	------	.58	.55	------	.64	.64	------
Forger's, heavy	.63	.63	.61	------	.58	.55	------	.64	.64	------
General	.60	.60	.56	.56	.53	.50	.50	.60	.60	.58
Machinist's	.60	.60	.56	.56	.53	.50	.50	.60	.60	.58
Molder's	.60	.60	.56	.56	.55	.50	------	.60	.60	------
Pipefitter's	.62	.62	.58	.58	.53	.50	.50	.62	.62	.60
Sheet-metal worker's	.60	.60	.56	.56	.53	.50	------	.60	.60	------
Shipfitter's	.60	.60	.56	------	.53	.50	------	.60	.60	------
Woodworker's	.62	.62	.58	.58	.56	.50	------	.62	.62	------
Hodcarrier	------	.63	.61	.61	.55	.55	------	.63	.63	------
Holder-on	.64	.64	.64	------	.61	.58	------	.65	.65	------
Laborer, classified	.55	.55	.52	[1] .52	.45	.35	.34	.55	.55	.56
Oiler	.74	.75	.68	.68	.68	.66	------	.70	.70	------
Rivet heater	.58	.58	.56	------	.45	.35	------	.58	.58	------
Sandblaster	.70	.70	.70	.70	.65	.65	------	.70	.70	------
Stablekeeper	.58	.58	.56	.56	.45	------	------	.58	.58	------
Stevedore	.66	.67	.64	------	.52	.52	------	.70	.70	------
Teamster	.58	.62	.56	.56	.48	------	.35	.62	.62	.62

[1] Rate at Naval Powder Factory, Indianhead, Md., and Naval Proving Ground, Dahlgren, Va., $0.50 per hour.

TABLE 2.—RATES OF WAGES PER HOUR IN THE LABORER, HELPER, AND MECHANICAL SERVICE—Continued

Trade or occupation	Boston	New York	Philadelphia	Washington	Norfolk	Charleston	New Orleans	Mare Island	Puget Sound	Great Lakes
Group III										
Anglesmith:										
Heavy fires	$0.94	$0.98	$0.92	-------	$0.92	$0.88	-------	$1.00	$1.00	-------
Other fires	.84	.88	.82	-------	.82	.78	-------	.90	.90	-------
Blacksmith:										
Heavy fires	.94	.98	.92	$0.92	.92	.88	-------	1.00	1.00	-------
Other fires	.84	.88	.82	.82	.82	.78	-------	.90	.90	-------
Boatbuilder	.87	.90	.85	-------	.85	-------	-------	.95	.95	-------
Boilermaker	.85	.90	.83	.83	.83	.81	-------	.90	.90	$0.86
Box maker	.62	.65	.60	.60	.58	.58	-------	.65	.65	.63
Brakeman	.75	.75	.75	.75	.75	.75	-------	.80	.80	-------
Buffer and polisher	.82	.82	.82	.82	.82	.82	-------	.88	.88	-------
Butcher	.73	.73	.73	.73	.73	-------	-------	.70	.70	-------
Calker, wood	.82	.87	.82	.82	.82	.78	$0.75	.90	.90	-------
Calker and chipper, iron	.84	.87	.82	-------	.82	.80	.75	.90	.90	-------
Cement finisher	.90	.93	.88	.88	.86	.86	.82	.96	.96	.91
Cement worker	.62	.62	.60	.60	.50	.40	-------	.60	.60	-------
Chauffeur	.66	.70	.63	.63	.60	.55	.57	.73	.73	.68
Conductor, railroad	-------	.81	.81	.81	.81	-------	-------	.83	.83	-------
Cooper	.72	.75	.70	-------	.68	-------	-------	.78	.78	-------
Coppersmith	.90	.95	.90	.90	.90	.83	.82	.93	.93	-------
Craneman, electric (under 20 tons)	.72	.75	.70	.70	.75	.68	-------	.78	.78	-------
Cupola tender	.77	.80	.75	.75	.75	-------	-------	.83	.83	-------
Die sinker	.96	1.00	.95	.95	.95	-------	-------	1.01	1.01	-------
Diver	1.86	1.86	1.86	-------	1.86	1.86	1.86	1.86	1.86	-------
Driller	.71	.74	.67	-------	.67	.67	-------	.77	.77	-------
Electrician	.92	.95	.90	.90	.90	.85	.84	.98	.98	.93
Electroplater	.87	.92	.85	.85	.85	.85	-------	.95	.95	-------
Engineman	.86	.90	.83	.83	.83	.81	.80	.93	.93	.88
Locomotive	.86	.90	.83	.83	.83	.81	-------	.93	.93	-------
Hoisting and portable	.86	.90	.83	.83	.83	-------	-------	.93	.93	-------
Steam shovel	-------	1.05	.98	.98	.98	-------	-------	1.06	1.06	-------
Fireman	.70	.73	.68	.68	.68	.66	.65	.76	.76	.73
Flange turner	.87	.92	.85	.85	.85	.85	-------	.93	.93	-------
Forger:										
Drop	.82	.90	.80	.80	.80	-------	-------	.88	.88	-------
Heavy	1.32	1.35	1.30	1.30	1.30	1.30	-------	1.38	1.38	-------
Foundry chipper	.63	.70	.64	.64	.64	-------	-------	.65	.65	-------
Frame bender	.87	.92	.85	-------	.85	.85	-------	.93	.93	-------
Furnace man:										
Anglework	-------	.70	.65	-------	.58	-------	-------	.68	.68	-------
Foundry	-------	.70	.65	.62	.60	.60	-------	.72	.72	-------
Heater	-------	.70	.65	.62	.60	.60	-------	.68	.68	-------
Heavy forge, heater	.72	.80	.75	.70	.70	.70	-------	.75	.75	-------
Other forge	.62	.70	.65	.62	.60	.60	-------	.68	-------	-------
Galvanizer	.69	.70	.64	-------	.64	.64	-------	.77	.77	-------
Gardener	.62	.62	.62	.62	.62	.62	.62	.72	.72	.62
Instrument maker	.89	.92	.87	.87	.87	.87	-------	.95	.95	-------
Joiner	.87	.90	.85	.85	.85	.85	.77	.95	.95	.90
Ladle man, foundry	.62	.70	.65	.65	.58	-------	-------	.68	.68	-------
Lead burner	1.05	1.05	1.05	1.05	1.05	1.05	-------	1.08	1.08	-------
Leather worker	.72	.75	.70	.70	.68	-------	-------	.78	.78	-------
Letterer and grainer	.92	.95	.90	.90	.90	.85	-------	.98	.98	.93
Loftsman	.90	.92	.90	-------	.90	.90	-------	.95	.95	-------
Machine operator	.67	.70	.65	.65	.65	-------	-------	.75	.75	-------
Machinist	.84	.90	.84	.84	.84	.80	.77	.91	.91	.89
Mason, brick or stone	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.15	1.15	1.12
Melter	.77	.80	.75	.75	.75	-------	-------	.83	.83	-------
Electric	-------	1.05	1.05	-------	1.05	-------	-------	1.05	1.05	-------
Open hearth	-------	-------	-------	1.10	-------	-------	-------	-------	-------	-------
Millman	.87	.90	.85	.85	.85	.85	-------	.95	.95	-------
Molder	.92	1.00	.94	.94	.94	.88	-------	1.00	1.00	-------
Ordnanceman	.75	.75	.75	.75	.75	.75	-------	.80	.83	-------
Packer	.65	.68	.63	.63	.63	.63	-------	.75	.75	.70
Painter	.87	.90	.85	.85	.85	.80	.79	.93	.93	.88
Pattern maker	.95	1.03	1.00	1.00	1.00	.90	-------	1.08	1.08	-------
Pipe coverer and insulator	.85	.88	.85	.85	.85	.83	-------	.88	.88	-------
Pipefitter	.92	.95	.90	.90	.90	.85	.84	.98	.98	.93
Plasterer	1.12	1.12	1.12	1.12	1.12	1.12	-------	1.15	1.15	1.12
Plumber	.92	.95	.90	.90	.90	.88	.87	.98	.98	.93
Printer, job	.86	.89	.84	.84	.84	.82	-------	.92	.92	-------
Puncher and shearer	.64	.73	.60	-------	.60	.58	-------	.70	.70	-------
Rigger	.87	.90	.83	.83	.83	.81	.77	.91	.91	.83
Riveter	.87	.90	.85	-------	.83	.80	-------	.90	.90	-------
Rodman	.60	.60	.60	.60	.60	.60	-------	.60	.60	-------
Sailmaker	.84	.87	.82	.82	.82	.82	-------	.90	.90	-------
Saw filer	.95	1.02	.93	.93	.93	.93	-------	.98	.98	-------
Sewer	.57	.57	.55	.55	.55	.45	-------	.55	.55	.50

TABLE 2.—RATES OF WAGES PER HOUR IN THE LABORER, HELPER, AND MECHANICAL SERVICE—Continued

Trade or occupation	Boston	New York	Philadelphia	Washington	Norfolk	Charleston	New Orleans	Mare Island	Puget Sound	Great Lakes
Group III—Continued										
Sheet-metal worker	$0.92	$0.95	$0.90	$0.90	$0.90	$0.88	.....	$0.98	$0.98	$0.93
Shipfitter	.82	.87	.82	.82	.82	.82	.....	.90	.90	.....
Shipwright	.87	.90	.85	.85	.85	.85	.....	.95	.95	.....
Tile and plate setter	.85	.88	.83	.....	.81	.81	.....	.88	.88	.....
Toolmaker	.90	.94	.90	.90	.90	.87	.....	.96	.96	.....
Trackman	.62	.62	.60	.60	.55	.55	.....	.62	.62	.62
Upholsterer	.87	.90	.85	.85	.83	.83	.....	.93	.93	.....
Water tender	.74	.77	.72	.72	.72	.70	.....	.80	.80	.....
Welder:										
Electric	.87	.90	.85	.85	.85	.83	$0.83	.91	.91	.....
Gas	.85	.85	.83	.83	.83	.80	.77	.88	.88	.....
Wharf builder	.87	.90	.85	.85	.85	.85	.....	.95	.95	.....
Group IVb										
Apprentice:										
First class	.60	.60	.60	.60	.60	.60	.....	.60	.60	.....
Second class	.48	.48	.48	.48	.48	.48	.....	.48	.48	.....
Third class	.35	.35	.35	.35	.35	.35	.....	.35	.35	.....
Fourth class	.25	.25	.25	.25	.25	.25	.....	.25	.25	.....

Wages Rates of Farm Labor, 1926

THE United States Department of Agriculture compiles quarterly the current wage rates of hired farm labor. Data are compiled separately for workers employed by the month and by the day, and separation is also made between wage rates which include board and those which do not include board. Wage rates by the day without board are, of course, the more nearly comparable with the wage rates of industrial workers.

Table 1 shows, for the United States as a whole, average farm wage rates and index numbers thereof, from 1910 to January, 1927. From 1923 to January, 1927, the details are also given for the months of January, April, July, and October. It will be noted that the wage rates for October are regularly the highest of any of the months reported.

The averages in Table 1 are, as noted, for the United States as a whole. There are wide variations between the several States. This is brought out in Table 2, which gives the average wages, by States, for October, 1925, and October, 1926.

TABLE 1.—FARM WAGE RATES AND INDEX NUMBERS THEREOF, 1910 TO JANUARY, 1927

Year	Average yearly wage [1]				Weighted average rate per month [2]	Index numbers of farm wages (1910–1914=100)
	Per month—		Per day—			
	With board	Without board	With board	Without board		
1910	$19.58	$28.04	$1.07	$1.40	$23.08	97
1911	19.85	28.33	1.07	1.40	23.25	97
1912	20.46	29.14	1.12	1.44	24.01	101
1913	21.27	30.21	1.15	1.48	24.83	104
1914	20.90	29.72	1.11	1.44	24.26	101
1915	21.08	29.97	1.12	1.45	24.46	102
1916	23.04	32.58	1.24	1.60	26.83	112
1917	28.64	40.19	1.56	2.00	33.42	140
1918	35.12	49.13	2.05	2.61	42.12	176
1919	40.14	56.77	2.44	3.10	49.11	206
1920	47.24	65.05	2.84	3.56	57.01	239
1921	30.25	43.58	1.66	2.17	35.77	150
1922	29.31	42.09	1.64	2.14	34.91	146
1923	33.09	46.74	1.91	2.45	39.64	166
1924	33.34	47.22	1.88	2.44	39.67	166
1925	33.88	47.80	1.89	2.46	40.12	168
1926	34.86	48.86	1.91	2.49	40.92	171
1923—January	27.87	40.50	1.46	1.97	32.61	137
April	30.90	44.41	1.55	2.09	35.42	148
July	34.64	48.61	1.84	2.44	40.30	169
October	34.56	48.42	2.02	2.58	41.52	174
1924—January	31.55	45.53	1.79	2.38	38.01	159
April	33.57	47.38	1.77	2.34	38.95	163
July	34.34	48.02	1.87	2.43	40.15	168
October	34.38	48.46	1.93	2.51	40.81	171
1925—January	31.07	45.04	1.74	2.31	37.24	156
April	33.86	47.40	1.77	2.33	39.04	163
July	34.94	48.55	1.89	2.44	40.62	170
October	34.91	48.99	1.95	2.53	41.23	173
1926—January	31.82	46.26	1.76	2.33	37.94	159
April	34.38	48.40	1.78	2.35	39.56	166
July	36.10	49.89	1.91	2.48	41.59	174
October	36.00	50.10	1.97	2.55	42.10	176
1927—January	32.94	47.07	1.79	2.36	38.79	162

[1] Yearly averages are from reports by crop reporters, giving average wages for the year in their localities, except for 1924 and 1925, when the wage rates per month are a straight average of quarterly rates, April, July, October of the current year, and January of the following year; and the wage rates per day are a weighted average of quarterly rates, April (weight 1), July (weight 5), October (weight 5), January of the following year (weight 1).

[2] This column has significance only as an essential step in computing the wage index.

TABLE 2.—AVERAGE WAGES PAID TO HIRED FARM LABOR, BY STATES, OCTOBER, 1925 AND 1926

State and division	Per month, with board		Per month, without board		Per day, with board		Per day, without board	
	1925	1926	1925	1926	1925	1926	1925	1926
Maine	$43.00	$45.00	$63.00	$64.00	$2.50	$2.60	$3.30	$3.25
New Hampshire	46.00	50.00	71.00	76.00	2.60	2.50	3.30	3.30
Vermont	46.00	36.00	66.00	65.00	2.50	2.60	3.20	3.20
Massachusetts	50.00	52.00	78.00	79.00	2.90	2.75	3.65	3.80
Rhode Island	50.00	51.00	72.00	78.00	2.80	2.80	3.65	3.60
Connecticut	51.00	54.00	76.00	80.00	2.70	2.85	3.70	3.80
New York	48.00	50.50	69.00	70.25	3.05	3.10	3.80	3.90
New Jersey	46.00	54.00	72.00	77.00	2.65	2.90	3.65	3.75
Pennsylvania	39.50	41.75	58.50	60.00	2.60	2.60	3.40	3.35
North Atlantic	45.29	47.75	66.88	68.67	2.78	2.82	3.58	3.62
Ohio	38.00	39.00	53.00	55.00	2.55	2.55	3.25	3.25
Indiana	35.00	37.00	48.00	50.00	2.20	2.55	2.85	2.85
Illinois	42.00	42.00	55.00	55.00	2.35	2.35	3.05	3.05
Michigan	41.00	43.50	58.00	61.50	2.65	2.75	3.35	3.50
Wisconsin	46.50	48.50	64.00	66.00	2.50	2.45	3.25	3.15
Minnesota	45.00	46.75	61.00	62.00	2.85	2.80	3.50	3.40
Iowa	45.50	46.25	57.00	56.75	2.50	2.50	3.15	3.10
Missouri	32.00	34.00	43.00	44.00	1.75	1.70	2.30	2.20
North Dakota	49.50	49.50	68.50	69.50	3.80	3.35	4.50	4.20
South Dakota	46.50	43.75	61.50	60.00	2.85	2.45	3.75	3.25
Nebraska	40.00	40.00	54.50	53.50	2.35	2.25	3.15	3.00
Kansas	36.00	37.00	50.00	51.00	2.20	2.20	2.90	2.90
North Central	40.80	41.91	55.10	56.12	2.45	2.41	3.14	3.08
Delaware	32.00	35.00	48.00	48.00	2.75	2.50	3.30	3.10
Maryland	34.50	35.75	50.75	51.00	2.35	2.25	3.10	2.95
Virginia	30.00	30.00	42.00	43.00	1.60	1.65	2.10	2.15
West Virginia	36.50	34.75	52.25	49.50	1.95	1.80	2.55	2.50
North Carolina	29.00	30.00	40.00	41.00	1.50	1.50	2.00	1.90
South Carolina	21.25	21.00	30.00	29.50	1.05	1.05	1.35	1.40
Georgia	20.50	21.50	28.75	29.50	1.10	1.10	1.35	1.45
Florida	26.00	28.00	38.00	42.50	1.35	1.50	1.85	2.00
South Atlantic	26.20	26.76	36.84	37.58	1.42	1.42	1.84	1.86
Kentucky	27.25	28.50	38.25	39.75	1.45	1.60	1.95	2.05
Tennessee	25.50	24.75	35.25	33.00	1.20	1.20	1.50	1.60
Alabama	26.00	22.50	34.00	31.50	1.20	1.25	1.55	1.60
Mississippi	22.00	23.75	32.00	33.70	1.25	1.25	1.70	1.65
Arkansas	25.00	30.00	35.00	37.50	1.25	1.25	1.75	1.70
Louisiana	23.00	24.00	34.75	36.00	1.40	1.35	1.65	1.80
Oklahoma	29.50	31.50	42.00	45.00	1.80	1.85	2.35	2.50
Texas	29.00	30.00	42.00	44.00	1.55	1.70	2.05	2.20
South Central	26.32	27.14	37.25	38.15	1.40	1.46	1.83	1.91
Montana	56.50	52.50	76.25	75.00	3.25	3.20	3.85	3.85
Idaho	54.50	56.00	76.00	77.00	2.85	2.85	3.70	3.65
Wyoming	47.00	49.00	69.00	70.00	2.55	2.50	3.40	3.40
Colorado	40.00	41.30	59.00	63.80	2.20	2.40	3.00	3.20
New Mexico	33.00	34.00	49.00	50.00	1.60	1.70	2.15	2.20
Arizona	44.50	45.00	73.50	65.00	1.95	1.75	2.65	2.50
Utah	56.50	54.50	76.50	75.00	2.65	2.40	2.90	3.10
Nevada	55.50	59.25	71.75	81.50	2.40	2.55	3.15	2.95
Washington	52.00	51.00	76.00	75.00	2.80	2.90	3.70	3.60
Oregon	45.00	51.00	65.00	76.00	2.40	2.50	3.10	3.25
California	60.00	63.00	87.00	90.00	2.55	2.55	3.60	3.65
Western	52.02	53.61	75.19	77.31	2.49	2.51	3.33	3.37
United States	34.91	36.00	48.99	50.10	1.95	1.97	2.53	2.55

Wages of Seamen, 1926

THE Bureau of Navigation of the United States Department of Commerce compiles detailed data, including wage rates, of seamen in the American merchant marine, with comparative wage rates of other countries. The tables below are compiled from its publication, Merchant Marine Statistics, 1926.

All wages shown in these tables, except American, are taken from consular reports. The American figures are averages taken from reports of the shipping commissioners. The wages on foreign vessels are stated in the United States equivalents of the foreign values, taken at the exchange rate on January 1 of the year named. When more than one rate has been reported for foreign vessels, due to length of service or other conditions, the highest is usually given in the table. The wages on American motor ships average about 10 per cent more than on steamships.

Table 1 gives a summary view of the average monthly wage rates of four typical classes of seamen, as of January 1, 1926, for the United States and for certain important foreign countries.

TABLE 1.—AVERAGE MONTHLY WAGES OF CERTAIN CLASSES OF AMERICAN AND FOREIGN SEAMEN ON STEAM AND MOTOR CARGO VESSELS OF 5,000 GROSS TONS OR OVER, JANUARY 1, 1926

Nationality	Able seamen	Carpenters	Chief engineers	Firemen
American:				
Private	$60	$75	$270	$62
United States Shipping Board	62	72	263	66
British	44	75	152	[1] 50
Danish	48	54	183	49
Dutch	40	46	151	42
French	17	20	127	18
German	22	27	98	[1] 24
Italian	20	23	69	21
Norwegian	[2] 38	[2] 43	[3] 81	[2] 39
Spanish	21	----	113	21
Swedish	40	46	148	40

[1] 1925.
[2] Wages were somewhat reduced by an agreement in force from May 15, 1926, to Feb. 1, 1927. [3] 1924.

Table 2 gives detailed data, similar to the above, for all classes of seamen, for the three years 1924, 1925, and 1926.

TABLE 2.—AVERAGE MONTHLY WAGES OF AMERICAN AND FOREIGN SEAMEN ON STEAM AND MOTOR CARGO VESSELS OF 5,000 GROSS TONS AND OVER ON JANUARY 1, 1924, 1925, AND 1926

Position	American						British			Danish			Dutch		
	Private			U. S. Shipping Board											
	1924	1925	1926	1924	1925	1926	1924	1925	1926	1924	1925	1926	1924	1925	1926
Deck department:															
First mate	$182	$176	$174	$192	$192	$184	$107	$119	$111	$99	$125	$151	$104	$110	$111
Second mate	159	137	151	168	166	163	73	84	79	77	99	116	79	84	84
Third mate	141	135	135	153	150	149	54	64	58	43	83	66	51	54	54
Fourth mate	122	118	115	145	146	150	45	57	51	----	78	66	----	----	----
Boatswain	74	72	73	75	74	74	45	55	51	34	----	54	43	46	46
Carpenter	78	74	75	80	78	72	67	68	75	34	49	54	43	46	46
Seaman, able-bodied	60	59	60	63	62	62	39	48	44	30	43	48	38	40	40
Seaman, ordinary	45	44	45	48	47	47	27	----	28	15	21	23	19	20	20
Engineer department:															
Chief engineer	285	275	270	272	274	263	142	155	152	120	157	183	142	150	151
Second engineer	184	176	174	192	192	183	107	119	114	86	111	132	96	102	103
Third engineer	160	151	151	168	166	162	73	84	79	63	86	98	68	72	72
Fourth engineer	142	135	136	153	150	147	54	64	58	50	74	77	47	50	46
Junior engineer	----	----	----	----	130	----	----	57	51	----	40	64	----	----	----
Fireman	63	62	62	65	65	66	45	50	----	31	38	49	40	42	42
Greaser	70	67	69	73	71	72	45	52	----	34	----	49	40	46	46
Water tender	69	68	69	73	73	72	43	52	49	34	42	54	----	----	----
Coal passer or wiper	54	52	53	58	58	58	39	----	44	21	25	33	32	34	34
Steward department:															
Chief steward	127	131	124	129	130	122	67	78	75	59	63	89	28	----	----
Second steward	108	98	100	113	108	100	49	60	61	----	----	----	----	----	----
Cook	108	111	102	111	109	100	62	73	70	43	63	66	55	58	----
Second cook	84	82	80	90	85	81	41	50	46	21	25	32	----	52	----
Mess steward	48	48	49	47	47	47	35	44	40	----	----	----	----	----	----
Mess boy	42	42	41	43	42	42	----	15	----	7	13	----	11	10	----

TABLE 2.—AVERAGE MONTHLY WAGES OF AMERICAN AND FOREIGN SEAMEN ON STEAM AND MOTOR CARGO VESSELS OF 5,000 GROSS TONS AND OVER ON JANUARY 1, 1924, 1925, AND 1926—Continued

Position	French			German [1]		Italian [1]		Norwegian			Spanish			Swedish [1]	
	1924	1925	1926	1925	1926	1925	1926	1924	1925	1926 [2]	1924	1925	1926	1925	1926
Deck department:															
First mate	$19	.....	$72	$64	$67	$49	$49	$64	.....	.....	$90	$98	$99	$100	$100
Second mate	19	.....	60	50	53	40	41	53	.....	.....	64	70	71	74	74
Third mate	.....	.....	48	38	40	36	35	38	.....	.....	38	42	42	59	59
Fourth mate	.....	.....	35	30	31	32	.....	.....	.....	.....	.....	.....	.....	.....	.....
Boatswain	.....	$24	20	26	27	26	25	28	$32	$43	26	28	28	46	46
Carpenter	19	24	20	26	27	26	23	28	32	43	.....	.....	.....	46	46
Seaman, able-bodied	17	21	17	19	22	21	20	25	28	38	19	21	21	40	40
Seaman, ordinary	15	18	15	11	12	13	.....	14	15	20	15	17	17	33	33
Engineer department:															
Chief engineer	100	.....	127	93	98	63	69	81	.....	.....	102	112	113	148	148
Second engineer	63	.....	72	64	67	40	41	59	.....	.....	64	70	71	90	90
Third engineer	46	.....	61	50	53	35	35	48	.....	.....	45	49	49	72	72
Fourth engineer	41	.....	50	38	40	.....	.....	.....	.....	.....	.....	.....	.....	55	55
Junior engineer	33	.....	.....	.....	26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fireman	19	23	18	24	.....	22	21	25	29	39	19	21	21	40	40
Greaser	19	24	20	25	26	.....	.....	.....	.....	.....	.....	.....	.....	43	43
Water tender	19	24	18	25	26	.....	.....	.....	.....	.....	26	28	28	.....	.....
Coal passer or wiper	17	21	17	19	.....	21	20	15	17	22	18	20	20	38	38
Steward department:															
Chief steward	28	.....	.....	20	24	26	25	48	.....	.....	26	28	28	73	73
Second steward	23	.....	.....	.....	.....	21	22	.....	.....	.....	.....	.....	.....	.....	.....
Cook	30	.....	.....	26	28	23	.....	30	.....	.....	.....	28	28	48	48
Second cook	25	.....	.....	.....	.....	22	.....	.....	.....	.....	.....	.....	.....	32	32
Mess steward	20	.....	.....	11	12	26	25	.....	.....	.....	10	10	11	.....	.....
Mess boy	.....	.....	.....	6	6	12	.....	.....	.....	.....	6	7	7	.....	.....

[1] No report for 1924.
[2] The wages for the positions named below were somewhat reduced by an agreement in force from May 15, 1926, to Feb. 1, 1927.

Table 3 shows the variations in the wage rates of seamen according to the destination of the vessels.

TABLE 3.—AVERAGE MONTHLY WAGES PAID ON AMERICAN MERCHANT VESSELS OF 500 GROSS TONS AND OVER, 1926, AS REPORTED BY THE SHIPPING COMMISSIONERS

Destination	Steam vessels						
	Able seamen	Boatswains	Carpenters	First mates	Second mates	Firemen	Trimmers
Great Britain	$62	$74	$78	$184	$151	$66	$58
Continental Europe	61	73	78	181	160	65	58
South America	61	73	78	178	157	64	55
West Indies, Mexico, and Central America	61	74	76	173	150	64	56
Atlantic and Gulf coasting trade	62	74	79	170	148	64	55
Asia and Australia	61	74	78	181	159	64	57
Pacific coasting trade	64	92	76	162	141	64	58
Africa	75	74	79	179	158	63	57
Atlantic to Pacific ports, and vice versa	60	72	76	176	152	63	55

Destination	Steam vessels—Continued		Sailing vessels				
	First engineers	Second engineers	Able seamen	Boatswains	Carpenters	First mates	Second mates
Great Britain	$251	$180	$60	$70	.....	$85	.....
Continental Europe	243	176	60	70	.....	85	.....
South America	245	174	60	70	.....	87	.....
West Indies, Mexico, and Central America	239	167	60	68	.....	84	$70
Atlantic and Gulf coasting trade	228	164	59	69	$70	85	74
Asia and Australia	257	178	63	95	.....	125	.....
Pacific coasting trade	214	157	90	.....	.....	130	110
Africa	241	174	60	75	.....	90	.....
Atlantic to Pacific ports, and vice versa	243	171	68	90	.....	128	115

Wage Rates of Theatrical Stage Employees and Moving-Picture Machine Operators

THE tables below have been compiled from current agreements and wage scales received from local unions of the International Alliance of Theatrical Stage Employees and Moving Picture Operators, supplemented by information furnished by their officers to inquiries by the bureau.

TABLE 1.—WEEKLY SCALE OF WAGES AND HOURS OF LABOR OF STAGE EMPLOYEES

[Where two rates are given they are the minimum and the maximum]

City	Weekly rate of wages				Maximum hours per day	Days per week	Rates per hour for—	
	Carpenters	Property men	Electricians	Head flymen			Overtime	Sunday work
Amarillo, Tex	$48.00	$48.00	$48.00	$45.00	8	6	$1.50 1.50	------
Atlanta, Ga	55.00 70.00	55.00 70.00	55.00 70.00	52.50 67.50	8	6	1.50	$3.00
Beaver Falls, Pa	45.00	45.00	45.00	[1] 2.00	------	6	------	[2]
Bethlehem, Pa	45.00	40.00	40.00	40.00	8	6	1.00	[3] 2.00
Binghamton, N. Y	55.00 60.00	50.00 55.00	50.00 55.00	45.00 50.00	8	6	------	2.50
Butte, Mont	52.50	52.50	52.50	52.50	8	7	1.50	------
Casper, Wyo	50.00	45.00	45.00	40.00	8	7	1.25	------
Columbia, S. C	42.50	42.50	37.50	37.50	8	6	.80	[4]
Danville, Ill	42.50	40.00	40.00	40.00	8	7	1.00	------
Danville, Va	37.50	30.00	37.50	30.00	8	6	1.50	------
Davenport, Iowa	50.00	50.00	50.00	50.00	8	7	1.00	[2]
Detroit, Mich	70.00 80.00	70.00 80.00	70.00 80.00	62.50 67.50	8	------	------	------
Dubuque, Iowa	47.50	35.00	35.00	35.00	8	7	1.00	------
Erie, Pa	50.00	50.00	50.00	50.00	8	6	1.25	[4]
Fitchburg, Mass	35.00	35.00	35.00	30.00	------	6	1.00	[1] 4.50
Florence, Ala	40.00	36.00	36.00	36.00	------	------	1.00	------
Ft. Wayne, Ind	44.00 52.00	44.00 52.00	44.00 49.00	42.00 46.00	8	7	------	------
Grand Rapids, Mich	50.00 60.00	45.00 50.00	45.00 50.00	45.00 50.00	------	7	1.50	------
Greensburg, Pa	45.00	45.00	45.00	45.00	------	------	------	------
Haverhill, Mass	40.00 45.00	35.00 40.00	35.00 40.00	32.50 35.00	8	6	1.00	[4]
Holyoke, Mass	50.00 60.00	45.00 55.00	45.00 55.00	40.00 50.00	------	7	------	------
Jefferson City, Mo	36.00	24.00	24.00	24.00	------	7	1.00	------
Kenosha, Wis	53.00	43.00	43.00	43.00	8	7	1.50	------
Lake Charles, La	42.00	35.00	35.00	14.00	------	------	------	------
Lewiston, Me	35.00	27.50	[5] 7.00	[5] 5.50	7	6	.60	------
Macon, Ga	47.50	42.50	42.50	42.50	8	6	[4]	[3]
Marietta, Ohio	35.00	35.00	35.00	35.00	------	------	------	------
McAlester, Okla	35.00	35.00	35.00	35.00	------	6	1.00	------
Meridian, Miss	45.00	[1] 4.00	[1] 4.00	[1] 4.00	------	------	1.00	------
Middletown, N. Y	36.00	26.00	36.00	[1] 2.00	8	------	------	------
Muscatine, Iowa	25.00	25.00	[5] 4.00	[1] 1.50	------	------	------	------
Muskegon, Mich	40.00	35.00	35.00	------	------	------	------	------
New Kensington, Pa	42.00	38.65	38.65	38.65	8	6	1.00	2.50
North Adams, Mass	35.00	30.00	------	[1] 2.50	------	6	------	[3]
Northampton, Mass	45.00 55.00	40.00 48.00	40.00 48.00	40.00 48.00	------	6	------	------
Olympia, Wash	[1] 3.50	[1] 3.50	[1] 3.50	[1] 3.50	------	6	------	[1] 3.50
Oshkosh, Wis	45.00	45.00	------	------	7	7	1.00	------
Port Arthur, Tex	52.00	52.00	52.00	52.00	8	7	------	------
San Mateo, Calif	55.00	55.00	55.00	[1] 4.50	8	6	------	------
Santa Rosa, Calif	38.50	38.50	38.50	38.50	7	6	1.10	------
Saratoga Springs, N. Y	30.00	25.00	[5] 5.00	[5] 5.00	------	6	------	------
Steubenville, Ohio	50.00	45.00	45.00	45.00	------	6	------	[3]
Stockton, Calif	52.50	52.50	52.50	50.00	8	6	1.25	------
Taunton, Mass	36.00	34.00	34.00	34.00	------	------	------	[2]
Torrington, Conn	38.00	35.00	35.00	------	8	6	------	[4]
Vineland, N. J	35.00 40.00	30.00 35.00	30.00 35.00	25.00	------	6	------	[4]
Waltham, Mass	46.00	41.00	41.00	------	7	6	1.25	[5] 8.00 [5] 10.00
York, Pa	35.00 42.50	27.50 37.50	27.50 ------	27.50 37.50	------	6	.75	1.25

[1] Per performance.
[2] Double time.
[3] Including holidays.
[4] Time and one-half.
[5] Per day.

TABLE 2.—RANGE OF WEEKLY WAGES AND HOURS OF LABOR OF MOTION-PICTURE MACHINE OPERATORS

City	Weekly wages		Hours per day	Rate per hour paid for—	
	Minimum	Maximum		Overtime	Sunday work
Akron, Ohio	$30.00	(1)	4	$1.87½	(1)
Albany, Ala	35.00	$65.00	6	1.50	(1)
Allentown, Pa	30.00	47.50	6–6½	1.25	$2.00
Amarillo, Tex	48.00	(1)	8	1.50	(1)
Baltimore, Md	30.60	65.00	6–9	1.50	(2)
Beaver Falls, Pa	39.00	42.00	7	1.00	(2)
Bethlehem, Pa	50.00	(1)	8	1.00	2.00
Boston, Mass	57.00	110.00	7	2.00	[5] 13.00
Butte, Mont	36.00	52.00	6	1.00–1.30	(1)
Casper, Wyo	50.00	(1)	8	(1)	(1)
Chattanooga, Tenn	47.50	65.00	6–6½	(3)	(2)
Columbia, S. C	35.00	37.50	6	(3)	(2)
Danville, Ill	42.50	(1)	8	1.00	(1)
Danville, Va	30.00	37.50	6	1.50	(1)
Dubuque, Iowa	40.00	(1)	8	1.00	(1)
Erie, Pa	35.00	51.00	5–7	1.25	(1)
Fall River, Mass	42.00	(1)	6	1.50	[4] 5.00
Fitchburg, Mass	40.00	43.00	6	1.25	2.00
Flint, Mich	55.00	(1)	8	(3)	(1)
Florence, Ala	36.00	(1)	(1)	1.00	(1)
Fort Wayne, Ind	40.00	65.00	6	1.50	(1)
Grand Rapids, Mich	30.00	40.00	6½	1.50	(1)
Greensburg, Pa	35.00	45.00	8	1.00	(2)
Holyoke, Mass	48.00	(1)	6	(1)	[5] 10.00
Indianapolis, Ind	33.00	56.00	(1)	1.10	(1)
Jefferson City, Mo	42.00	50.00	6	1.25	(1)
Kenosha, Wis	43.00	52.00	4–5	1.50	(1)
Kewanee, Ill	40.00	(1)	8	.75	(1)
Lake Charles, La	10.50	27.50	8	[6]	(1)
Lawrence, Mass	42.00	(1)	6	1.17	1.75
Lawton, Okla	35.00	(1)	7	(1)	(1)
Lewiston, Me	30.00	37.50	7	.60	(1)
Los Angeles, Calif	29.50	60.00	3½–7	1.30–2.00	(1)
Macon, Ga	41.25	(1)	6	(3)	(2)
Mansfield, Ohio	45.00	47.00	8	1.00	(1)
Marietta, Ohio	35.00	(1)	8	.90	(1)
McAlester, Okla	35.00	(1)	8	1.00	(1)
Memphis, Tenn	42.00	57.50	6	(3)	(1)
Meridian, Miss	40.00	(1)	6⅓	1.00	(1)
Middletown, N. Y	39.00	(1)	8	(1)	(1)
Mobile, Ala	32.50	45.00	6½	(3)	(1)
Muscatine, Iowa	35.00	(1)	(1)	(1)	(1)
Muskegon, Mich	30.00	37.00	6½–8	(1)	(1)
Nashville, Tenn	21.00	40.00	3–6½	(3)	(3)
New Kensington, Pa	25.00	42.00	5–8	1.00	2.50
North Adams, Mass	36.00	(1)	6	1.00	(2)
Northampton, Mass	47.50	(1)	6	1.75	1.75
Olympia, Wash	37.50	(1)	5½	1.25	1.10
Oshkosh, Wis	45.00	(1)	7	1.00–1.25	(1)
Pittsburgh, Pa	32.70	65.34	4½–8	(3)	(2)
Pittsfield, Mass	28.00	48.00	3 –6	1.50	1.25–1.75
Port Arthur, Tex	28.00	45.00	4 –6	1.00–1.50	(1)
St. Joseph, Mo	25.00	(1)	7	1.00	(1)
San Mateo, Calif	40.00	52.00	6½	(3)	(2)
Santa Rosa, Calif	28.00	45.00	4 –7	1.00–1.20	(1)
Saratoga Springs, N. Y	35.00	(1)	6	1.00	(2)
Sharon, Pa	31.68	48.00	8	(3)	(3)
Springfield, Ill	37.03	48.00	6 –8	2.50	(1)
Springfield, Mass	49.00	(1)	6	2.25	2.25
Steubenville, Ohio	35.00	60.00	6 –10	1.50	3.00
Stockton, Calif	54.00	(1)	8	1.25	(2)
Taunton, Mass	35.00	(1)	6	1.50	1.75
Toledo, Ohio	40.00	57.00	6	1.50	(1)
Torrington, Conn	38.58	(1)	7	(1)	(2)
Vineland, N. J	35.00	40.00	6	(1)	(1)
Waltham, Mass	46.00	(1)	7	1.25	[5] 10.00
Washington, D. C	36.00	71.40	5 – 9	(3)	(1)
Wilkes-Barre, Pa	24.00	50.00	3½– 6½	1.25	1.25
York, Pa	30.00	42.50	6	(1)	1.25

[1] Not reported.
[2] Double time.
[3] Time and one-half.
[4] For 3 hours.
[5] Per day.
[6] Regular rate.

Table 1 shows the weekly wage rates and hours of labor for four of the principal occupations of stage employees, in the 48 cities for which this information is available.

Table 2 gives the range of weekly wage rates, and hours of labor, for moving-picture operators in the 73 cities for which this information is available. The range is given, as in certain cities there are numerous variations of wage rates due to differences in the type of theater and the character of the performance.

Wage Rates and Hours Established by Recent Agreements

Bindery Women—Chicago

THE wage scale of Bindery Women's Local Union No. 30, Chicago, in effect November 15, 1926, contains piecework prices mainly. The following weekly rates are mentioned: Folding machine operating, ruling machine feeding, blank book sewing, Singer sewing machine operating, rotary perforating, and miscellaneous table work, $25; paging and numbering, $26; gold layers and sizers, $25.50; head gold layers, $26.50. Apprentices receive $15 a week for the first six months, $17.50 for the second, $20 for the third, and $22.50 for the fourth six months.

Cloth Hat, Cap, and Millinery Workers—Denver

AN AGREEMENT between the Cloth Hat, Cap and Millinery Workers' Local Union No. 38 and the Perfection Cap Works of Denver, made March 1, 1927, calls for a 44-hour week, six holidays with pay, overtime at the rate of time and a half, and all new help to be on trial for two weeks before being permanently engaged and wages agreed upon. The union agrees to supply needed help whenever possible, but in case it is unable to do so, the firm may employ apprentices for any department where necessary.

The wages of regular workers are not stated, but apprentices start at stated amounts which are increased by one dollar every two months for a period of six months. At the end of six months those apprentices kept by the firm are to join the union and their wage is fixed by "mutual understanding and agreement of the union and the firm."

Electrical Workers—Chicago

THE scale of wages to be paid by the Electrical Contractors' Association to journeymen members of Electrical Workers' Local No. 134 of Chicago, according to a resolution of the joint arbitration board, July 9, 1926, is as follows: July 9, 1926, $12 per day; January 1, 1927, $12.50 per day; June 1, 1927, to June 1, 1929, $13 per day.

The Illinois Bell Telephone Co., by agreement effective August 1, 1926, to May 31, 1929, pays its men as follows for a 44-hour week: General foremen, $300 per month; foremen, $9.25 per day; cablemen, splicers, and installers, $8.50 per day; apprentices, $4.25 to $6 per day, the rate increasing 25 cents per day every six months for four years.

Hod Carriers—Indianapolis

ACCORDING to an agreement made August 1, 1926, between Hod Carriers' Local No. 120 and the Indianapolis Mason Contractors' Association, brickcarriers, wheelers, pickers, hackers and sand screeners working on the building for masons and fireproofers; handlers of tile and terra cotta, mortar makers (whether working by hand or machinery), carriers and wheelers, and scaffold builders receive 87½ cents per hour. Double time is paid for all overtime after 7 p. m., for Sunday, and for holiday work.

Hoisting Engineers—New York City

IN THE agreement between Local No. 403 of the United Hoisting Engineers and the Iron League of New York, dated November 16, 1926, the hours are set at 44 per week, and wages at $92.40 per week, with double rate for overtime.

Locomotive Firemen

THE wages of locomotive firemen, helpers on electric locomotives, hostlers, and hostlers' helpers, as determined February 5, 1927, for various eastern railroads by a conference committee of managers meeting with the president of the firemen's union, are shown in the following table. Other details of the agreement are given on page 173.

RATES OF PAY PER DAY FOR FIREMEN AND HELPERS

Weight on drivers (pounds)	Passenger service		Freight service		Yard service	
	Firemen (steam)	Helpers (electric)[1]	Firemen (steam)	Helpers (electric)[1]	Firemen (steam)	Helpers (electric)[1]
Less than 80,000	$4.90	$4.90	$5.38	$5.38		
80,000 to 100,000	4.99	4.90	5.46	5.38	$5.68	$5.68
100,000 to 140,000	5.07	4.90	5.63	5.38		
140,000 to 170,000	5.25	4.90	5.81	5.38		
170,000 to 200,000	5.33	4.90	5.98	5.38	5.81	5.68
200,000 to 250,000	5.42	5.07	6.15	5.55		
250,000 to 300,000	5.42	5.07	6.32	5.55	5.93	5.68
300,000 to 350,000	5.50	5.07	6.50	5.55		
350,000 to 400,000	5.59	5.07	6.67	5.55		
400,000 to 450,000	5.68	5.25	6.67	5.55	6.11	5.85
450,000 to 500,000	5.76	5.25	6.67	5.55		
500,000 and over	5.85	5.25	6.67	5.55		
Mallets, less than 275,000	6.19	----------	6.67	----------	6.88	----------
Mallets, 275,000 and over	6.19	----------	7.00	----------	7.14	----------

[1] Helpers are second men employed on electric locomotives.

The rates per day for hostlers and hostlers' helpers are: Outside hostlers, $6.36; inside hostlers, $5.68; and hostlers' helpers, $5.07.

Longshoremen—Hampton Roads

THE agreement made by the longshoremen's locals 846, 862, 944, 970, 983, 984, and 985 at Hampton Roads and vicinity, October 1, 1926, contains the following rates of wages per hour:

Class of work handled	Straight time	Overtime
General cargo	$0.75	$1.10
Sulphur and steel dust in bulk or bags	.80	1.15
Wet hides	.90	1.25
Screwing cotton and tobacco aboard ship; frozen meats and other cargo in compartments under refrigeration	.95	1.30
Explosives in stream	1.50	2.20

The checkers and weighers' agreement of locals 862 and 970 calls for $3 for each 4-hour period, straight time, and $1.10 per hour for night periods, overtime, Saturday afternoons, Sundays, and holidays.

Mailers

DENVER.—The agreement of Mailers' Local No. 8 with the newspapers of Denver, effective for two years from January 10, 1927, contains the following weekly wage scale: Day shift, first year $37, second year $39; night shift, first year, $38, second year, $39.

Oklahoma City.—The agreement of Mailers' Local No. 30 with the newspapers of Oklahoma City for three years from September 22, 1926, provides for a daily wage scale of $6.33⅓ for day work, and of $6.58⅓ for night work.

Meat Cutters, Westchester County, N. Y.

THE agreement of Meat Cutters' Locals No. 489, 631, and 254 with the employers in Westchester County, N. Y., November 1, 1926, provides for a wage scale of $48 for a 6-day week (5 if it includes a holiday), and seven holidays. The stores are to open at 7 a. m. and close at 6 p. m. (9 p. m. on Saturdays and one or two nights before a holiday); and employees are to have one hour for dinner, and one-half hour for supper when store closes at 9 p. m.

Metal Polishers—Boston

MEMBERS of Metal Polishers' Union, Local No. 95, by agreement with the Boston Elevated Railway Co., August 1, 1926, work 44 hours per week at 90 cents per hour, with overtime at the rate of time and a half and double time for Sundays and holidays.

Pressmen

BINGHAMTON, N. Y.—Local No. 57 entered into an agreement, September 1, 1926, with newspapers of Binghamton, providing for 8 hours' work per day and 7½ per night; overtime, time and a half; Sundays and holidays, double time. The scale is: Journeymen, $45 per week for day work, $48 for night work; assistant foreman to receive $5 a week more and foreman $15 per week more than journeymen. Apprentices receive $21 per week during the first year, $25.50 the second year, $30 the third year, and $35 the fourth year for daywork. Night workers receive $3 additional.

Cleveland, Ohio.—The agreement of Web Pressmen's Local No. 5 with daily newspapers of Cleveland, September 7, 1926, to September 3, 1929, contains the following scale of wages:

	Rate per week
Pressmen in charge	$54.50
Off-side color man	51.50
All other journeymen	48.50
Apprentice:	
First year	27.00
Second year	30.00
Third year	33.00
Fourth year	37.00
Fly-boy:	
First year	22.00
Second year	25.00

Any journeyman acting as foreman in the absence of the foreman shall receive not less than $11 per day or night. For overtime, time and a half is paid. The hours are 8 per day and 7 per night.

Detroit, Mich.—The agreement of Web Pressmen's Local No. 13 with daily newspapers of Detroit, October 1, 1926, to September 1, 1929, contains the following scale of wages:

> Men in charge of color presses shall receive $10 per day or night; men in charge of black presses shall receive $9.50 per day or night, and other journeymen shall receive $8.50 per day or night; the scale for apprentice and fly-boy shall be for the first year, $4.50 per day or night; for the second and third years, $5.50 per day or night; fourth and fifth years, $6.50 per day or night.

For overtime, Sundays, and holidays time and one-half is allowed. Daywork consists of 8 hours; night work, 7 hours.

Scranton, Pa.—Local No. 119 made a two-year contract with publishers of Scranton on September 1, 1926. The hours are 8 per day and 7 per night. The overtime rate is time and a half, with double time for Sundays and after midnight. No scale is included for foreman or assistant foreman. The minimum for second pressman is $54 a week; third pressman, $51; fourth pressman, $49; and fifth pressman, $48. Apprentices are to be paid during the first year, $2.50 per day; second year, $3.50; third year, $4.50; and fourth year, $5.50; for night work $1 additional is to be paid. A pressman assuming charge of a press receives the highest rate of the scale plus $2 a day.

Stereotypers

BINGHAMTON, N. Y.—Local union No. 20 made an agreement with the Binghamton Press Co., September 1, 1926, providing for a scale of $45 for a 6-day week, the hours to be 8 per day and 7 per night. For overtime, time and a half is paid, and for Sundays and holidays, double time. Foremen receive $1 per day extra. Apprentices are paid per week as follows: First year, $19; second year, $23; third year, $27; fourth year, $33; and fifth year, $39.

Denver, Colo.—In the agreement made January 1, 1927, by Local No. 13, Denver, with newspapers of that city, journeymen receive $46 per week for daywork and $48.50 for night work, a week to consist of 48 hours. Overtime is paid for at the rate of time and a half. Five hours is a day's work on Sunday. Apprentices receive 30 per cent of the journeyman's scale the first year, 40 per cent the second, 50 per cent the third, 65 per cent the fourth, and 85 per cent the fifth.

Harrisburg, Pa.—Local No. 107 made a two-year agreement with a newspaper of Harrisburg on January 1, 1927, providing for a 48-hour week, time and a half for overtime, and double time for Sundays and holidays. The journeymen's scale is $8 per day, $8.33 per night; foreman, $8.33 per day, $8.67 per night. Third-year apprentices receive 33⅓ per cent of the journeyman's scale; fourth-year apprentices, 50 per cent; and fifth-year apprentices, 66⅔ per cent.

Typographical Unions

ALTOONA, PA.—A newspaper scale made October 1, 1926, between Local No. 240 and newspapers of Altoona, calls for a 48-hour week. Journeymen are to receive for daywork a minimum of $41.92 a week, machinist-operators $43.92, foremen $46.92; night

workers to receive $2 additional. For overtime, time and a half is paid; and for Sundays and holidays, double time. Apprentices receive 50 per cent of a journeyman's salary during the third year, 60 per cent during the first half of the fourth year, and 80 per cent during the first half of the fifth year.

Binghamton, N. Y.—Local No. 232, Binghamton, made an agreement with the newspapers of that city September 1, 1926, by the terms of which the minimum for journeymen is $45 a week, and for machinist-operators $47 a week for daywork and $3 additional for night work. A week consists of 48 hours. Time and a half is paid for overtime work and double time for Sundays and holidays. The weekly scale for apprentices is as follows: First year—first six months $13, second six months $15; second year—first six months $17, second six months $19; third year—first six months $21, second six months $23; fourth year—first six months $27, second six months $31; fifth year—first six months $35, second six months $41. Apprentices employed at night receive $3 per week over day scale.

Boston, Mass.—The three-year agreement of Typographical Union No. 13 with the Boston newspapers, November 16, 1926, calls for a 44-hour week, time and a quarter for overtime up to 48 hours, and time and a half thereafter. The scale calls for a minimum of $1.25 per hour for day work, $1.29 per hour for night work, and $1.33 per hour on the lobster shift. The apprentice scale per week is as follows: Day work, third year, $27.77; fourth year, $30.97; and fifth year, $34.18. For night work third-year apprentices receive $28.84, fourth-year apprentices $32.04, and fifth-year apprentices $35.24.

Canton, Ohio.—The agreement between the Typographical Union No. 219 and a Canton newspaper, effective October 1, 1926, to December 31, 1929, calls for a 48-hour week, time and a half for overtime for 4 hours, and double time thereafter and for Sundays and holidays. The weekly scale is as follows:

Occupation	Oct. 1, 1926		Dec. 31, 1927		Dec. 31, 1928	
	Evening papers	Morning papers	Evening papers	Morning papers	Evening papers	Morning papers
Printers	$50.00	$54.50	$51.00	$55.50	$52.00	$56.50
Assistant foremen	54.50	57.50	55.50	58.50	56.50	59.50
Machinists	55.00	55.00	56.00	56.00	57.00	57.00

Proofreaders are to receive not less than two-thirds of the scale.

Evansville, Ind.—The agreement between Typographical Union No. 35 and the newspapers of Evansville, for three years from November 1, 1926, provides for a 48-hour week, $46.25 a week from November 1, 1926, $47 from November 1, 1927, and $48 from November 1, 1928, for day work; and $3 per week additional for night work. For overtime time and a half is paid.

Hamilton, Ohio.—A three-year agreement between Typographical Union No. 290 and the newspapers of Hamilton, January 1, 1927, provides for a 48-hour week, with overtime at the rate of time and a half. The minimum weekly scale for journeymen and foremen is $40 during 1927, $41 during 1928, and $42 during 1929, for day work, with $1 per week additional for night work.

The weekly scale for apprentices is as follows:

	Day work	Night work
First year	$5	$6
Second year	7	8
Third year	9	10
Fourth year	12	13
Fifth year	15	16

Knoxville, Tenn.—An agreement, effective November 10, 1926, to October 1, 1931, made by Typographical Union No. 111 with the newspapers of Knoxville, provides for a scale of $7.25 per day and $7.75 per night, except for machinist-operators, who get 50 cents more. After 8 hours the scale is time and a half. Rates of pay for apprentices are 40 per cent of the journeymen's scale during the third year, 60 per cent for the fourth year, and 80 per cent for the fifth year.

Muncie, Ind.—Typographical Union No. 332, of Muncie, made an agreement, effective November 1, 1926, to February 1, 1928, with the newspapers of that city which gives journeymen on day work $42 per week from November 1, 1926, $43.50 from February 1, 1927, $44 from November 1, 1927, and $45 from February 1, 1928, if the contract continues after that date. Journeymen working nights receive $3 a week additional. The week consists of 48 hours, with time and a half for overtime. Foremen receive a dollar a day additional. Apprentices during the third year receive 50 per cent of the journeyman's scale; fourth year, 60 per cent; and fifth year, 70 per cent.

Oneonta, N. Y.—The agreement of Typographical Union No. 135, effective May 1, 1926, covers both newspapers and book and job work. Forty-eight hours constitute a week's work for the former and 44 hours for the latter. The scale is the same for both classes. Journeymen receive $36 per week for day work and $38.50 for night work; machinist-operators and foremen, $2 per week additional. The overtime rate is time and one-half. The weekly scale for apprentices is as follows:

	Day work	Night work
Third year	$18.00	$19.28
Fourth year	22.50	24.06
Fifth year, first 6 months	27.00	28.89
Fifth year, second 6 months	31.50	33.69

Providence, R. I.—A three-year agreement with the newspapers of Providence, effective November 1, 1926, has been made by Typographical Union No. 33. It provides for an 8-hour day at $52 per week and a 7½-hour night at $55 per week, with overtime at the rate of time and a half.

Rochester, N. Y.—A three-year agreement between Typographical Union No. 15 and the newspapers of Rochester, made November 1,

1926, provides for a day scale of $48.50 a week from November 1, 1926, and $50 from November 1, 1927, and a night scale of $4 additional. A week consists of 48 hours, after which the overtime rate of time and a half applies. For Sunday and holiday work double time is paid.

Waterbury, Conn.—The five-year agreement of Typographical Union No. 329 with the newspapers of Waterbury, January 1, 1927, calls for a 48-hour week, weekly scale of $41 for day work and $46 for night work during the first year, with an additional dollar per week for each of the second and third years, and overtime at time and a half. Apprentices receive 20 per cent of the scale for the first year, 35 per cent the second, 50 per cent the third and fourth, and 80 per cent the fifth year.

Woonsocket, R. I.—The three-year agreement of Typographical Union No. 245 with the newspapers of Woonsocket, November 29, 1926, calls for a 48-hour week, with overtime at time and a half for the first 4 hours and double time thereafter, and double time for Sundays and holidays. Job men work 44 hours a week. The minimum weekly scale for compositors is $39.50, for linotype operators $41, and linotype machinist-operators and linotype machinists $42, with $3 per week extra for night work in each case. The apprentice scale after the second year is as follows:

Third year:	
First six months	$21
Second six months	23
Fourth year:	
First six months	27
Second six months	29
Fifth year:	
First six months	32
Second six months	34

Hourly Earnings in Metal Trades, Philadelphia

THE Metal Manufacturers' Association of Philadelphia and vicinity issues a semiannual report of hourly earnings of metal workers employed by the members of the association. Two of these reports have recently been received by the Bureau of Labor Statistics. The table following, taken from these reports, brings into comparison the earnings in October, 1926, with those of certain earlier periods.

The average hourly earnings shown for October, 1926, are somewhat lower than those for April, 1926. The report points out that "this does not mean that earnings in the various classifications are lower. As a matter of fact, in the majority of instances the average classification earning is higher than six months ago. It is due to the fact that amongst the employees of the firms reporting was a much greater number (109 per cent more than in April, 1926) of helpers, laborers, and female operatives, classes of work wherein hourly earnings are low."

Table 1 shows a comparison of hourly earnings in the industry as revealed by the surveys of the association:

TABLE 1.—AVERAGE HOURLY EARNINGS IN THE METAL TRADES IN PHILADELPHIA AT SPECIFIED PERIODS, APRIL, 1920, TO OCTOBER, 1926

Survey period	Number of plants reporting	Number of employees reporting	Average hourly earnings
			Cents
April, 1920	187	29,114	56.7
October, 1923	139	28,776	56.4
October, 1924	167	26,243	57.8
October, 1925	150	27,555	56.6
April, 1926	141	25,942	58.2
October, 1926	144	38,782	57.1

Table 2 shows the number and per cent of employees at different levels of earnings in October 1926.

TABLE 2.—PER CENT OF METAL-TRADES EMPLOYEES EARNING CLASSIFIED AMOUNTS PER HOUR IN PHILADELPHIA, OCTOBER, 1926

Earnings per hour	Total number of employees	Per cent of employees earning each classified amount			
		All departments	Tool room	Machine shop	Iron foundry
Under 35 cents	1,846	4.8	0.3	2.8	3.1
36 to 45 cents	9,126	23.5	4.7	22.1	17.1
46 to 55 cents	9,130	23.5	5.4	23.5	25.0
56 to 65 cents	8,248	21.3	16.6	24.9	10.6
66 to 75 cents	6,917	17.8	40.6	19.5	10.9
76 to 85 cents	2,248	5.8	24.7	5.7	9.9
86 cents and over	1,267	3.3	7.7	1.5	23.4

Tool makers' earnings average a little more than six months ago. Earnings of machinsts, polishers, and wood-pattern makers average less than in April. Labor in the machine shop is higher than in April but is below the average for outside labor or labor in the foundries. Earnings of the latter two classes show slight recessions from April this year. Female operatives average 15 per cent higher earnings than at any time since this method of report was started (April, 1920).

Apprentices are reported in large numbers. The ratio of machinists' apprentices to the numbers reported under those classifications which we believe requires apprentice training is 1 apprentice to 15 journeymen; in the pattern shop it is 1 apprentice to 6 journeymen. In the brass and iron foundries the ratio of molding apprentices to bench and floor molders is 1 to 10, this is a very good showing. The fact that so many more first-year apprentices are reported leads to the hope that the association's effort to revive apprenticeship is having effect and that this desirable tendency may continue.

Table 3 shows, in detail, the average hourly earnings at certain dates, 1920 to 1926:,

TABLE 3.—AVERAGE EARNINGS PER HOUR IN METAL TRADES IN PHILADELPHIA AND VICINITY

Department and occupation	Total employees, October, 1926	Average hourly earnings				
		April, 1920	October, 1924	April, 1925	April, 1926	October, 1926
		Cents	*Cents*	*Cents*	*Cents*	*Cents*
Tool room:						
Die maker	160	-------	74.7	70.3	72.7	73.2
Die sinker	34	-------	73.2	75.0	78.7	72.2
Grinder (cutters)	40	58.4	60.9	61.6	60.5	59.8
Grinder (universal)	50	-------	63.1	66.3	66.9	66.3
Lathe hand	86	-------	66.2	66.8	69.3	68.2
Tool crib tender	138	-------	49.9	49.0	50.0	50.0
Tool maker (all around)	842	72.2	72.3	74.6	74.3	75.8
Machine shop:						
Apprentice, 1st year	174	-------	27.0	26.3	27.3	26.3
Apprentice, 2d year	114	-------	31.3	32.6	36.7	33.5
Apprentice, 3d year	101	-------	36.1	37.8	39.1	38.6
Apprentice, 4th year	117	-------	40.0	44.8	47.3	46.1
Assembler (semi-skilled) on apparatus or parts	1,399	-------	62.1	56.2	51.4	54.4
Bench hand, skilled	1,301	55.7	60.6	65.5	63.6	62.3
Boring mill, horizontal under 6′	135	67.5	69.8	69.7	71.3	70.8
Boring mill, vertical 6′ and over	124	67.5	65.3	66.3	69.0	68.5
Boring mill, vertical	79	-------	73.6	67.8	76.7	73.0
Boy	96	-------	31.9	30.8	30.0	29.6
Crane operator (traveling)	218	53.2	51.5	52.2	54.8	55.6
Cut off saw operator	41	52.5	49.6	50.4	52.8	54.1
Drill press hand, plain	452	50.1	56.0	52.5	58.1	56.9
Drill press, radial	228	55.5	60.7	54.9	61.4	62.0
Erector (floor inside)	1,060	61.9	63.7	65.2	66.9	64.2
Erector (outside)	59	-------	69.1	77.3	69.9	76.6
Fox lathe hand	26	59.8	67.7	67.6	65.5	67.5
Gear cutter	63	59.5	57.0	61.8	60.7	66.7
Grinder (ball)	31	-------	58.7	58.8	59.4	55.2
Grinder (bore)	37	-------	60.0	61.0	64.0	66.2
Grinder (cylindrical)	39	-------	62.9	65.1	67.0	71.6
Grinder (groove)	57	-------	55.1	62.6	62.3	68.8
Grinder (rough)	135	-------	54.5	53.9	56.2	59.3
Grinder (wet)	16	-------	56.1	66.8	74.3	71.6
Grinder (surface)	59	54.9	58.8	61.5	65.6	64.8
Heat treater	72	-------	54.8	56.5	54.9	60.6
Helper	1,848	45.9	46.6	45.9	47.7	46.0
Inspector	1,410	50.9	57.1	52.6	56.1	55.8
Instrument maker	193	61.8	68.5	70.1	74.8	79.9
Key seater	22	-------	57.1	58.4	59.7	60.2
Laborer (inside common)	1,972	46.6	43.0	41.3	41.7	42.4
Lathe hand, under 36″	530	61.4	62.7	65.6	64.6	67.3
Lathe hand, 36″ and over	213	70.8	68.8	72.2	72.1	75.2
Machine repairman	196	-------	63.4	63.6	64.0	66.8
Machinist (all around)	1,608	69.0	67.4	67.9	69.6	68.7
Milling-machine operator	403	55.3	60.1	63.5	63.9	65.8
Planer operator	197	68.9	68.2	69.6	69.5	70.1
Power press set-up	61	-------	68.7	63.5	71.4	68.8
Power press operator	606	-------	56.4	49.1	61.0	61.3
Punch press set-up	30	-------	63.0	63.1	68.7	68.5
Punch press operator	1,097	53.9	58.4	58.4	60.3	55.7
Rigger	182	59.7	59.3	56.6	60.5	59.1
Screw machine (automatic) set-up	29	63.0	70.0	70.8	74.9	72.6
Screw machine (automatic) operator	145	62.8	66.9	66.7	68.8	71.3
Screw machine (hand) set-up	24	-------	66.3	67.7	63.4	65.9
Screw machine (hand) operator	204	54.1	57.5	58.8	61.6	64.0
Shaper operator	124	64.8	64.5	64.6	64.6	65.4
Slotter operator	76	64.8	64.7	66.7	67.3	68.5
Tool hardener	10	-------	56.3	64.9	75.6	72.7
Turret-lathe operator	235	54.1	59.3	61.2	63.2	65.1
Boiler, tank, and structural-iron shop:						
Boiler maker	605	65.1	66.5	67.6	66.5	67.9
Bolter-up	68	-------	51.9	51.4	52.2	51.3
Caulker	90	-------	69.8	70.1	93.5	64.1
Helper	866	52.1	46.6	47.7	47.9	49.1
Holder-on	28	-------	55.4	56.6	68.7	55.6
Ironworker, ornamental	41	-------	59.4	60.1	66.5	66.5
Ironworker, light structural, inside	244	66.2	65.4	63.9	64.6	66.7
Layer-out	124	-------	69.7	71.4	71.6	69.5
Punch operator	58	-------	59.7	54.0	57.2	53.4
Riveter	175	63.8	62.4	62.3	66.4	61.4
Rivet heater	31	-------	45.1	45.6	51.2	45.0
Shear operator	182	-------	59.2	52.5	57.6	56.4

TABLE 3.—AVERAGE EARNINGS PER HOUR IN METAL TRADES IN PHILADELPHIA AND VICINITY—Continued

Department and occupation	Total employees, October, 1926	Average hourly earnings				
		April, 1920	October, 1924	April, 1925	April, 1926	October, 1926
		Cents	*Cents*	*Cents*	*Cents*	*Cents*
Blacksmith shop:						
Blacksmith (general)	150	68.3	69.6	71.9	70.6	71.5
Blacksmith (heavy fires)	65	-------	80.6	88.3	88.4	78.3
Blacksmith (light fires)	65	-------	67.3	62.1	67.2	66.6
Hammer operator, drop	47	-------	59.0	69.6	70.7	67.1
Hammer operator, steam	21	-------	75.9	72.0	75.9	88.8
Helper	558	52.7	49.2	49.1	50.5	48.8
Tool dresser	10	-------	73.6	74.2	69.3	69.3
Sheet-metal shop:						
Brazer	4	-------	57.0	68.0	59.0	62.0
Coppersmith	22	91.5	83.7	83.0	78.2	88.0
Lacquerer and sprayer	108	-------	57.9	54.7	54.2	61.0
Metal spinner	12	-------	80.0	73.6	69.0	73.7
Sheet-metal worker	501	71.2	66.8	64.9	64.5	65.3
Solderer	16	-------	56.4	58.1	60.5	63.9
Tinsmith	37	67.2	71.6	72.7	73.2	73.6
Polishing department:						
Buffer	94	56.9	73.8	72.6	76.7	75.2
Plater	143	52.9	64.3	76.1	78.2	75.2
Plater's helper	91	-------	45.2	41.7	42.6	46.0
Polisher	422	56.9	69.1	64.6	70.7	66.4
Chandelier department:						
Assembler	8	-------	67.6	64.5	64.0	47.0
Chandelier maker	39	60.4	58.1	52.3	57.2	61.1
Chandelier filer	7	-------	47.0	44.6	50.2	66.4
Chandelier hanger	9	-------	73.0	75.2	75.0	72.6
Pattern shop:						
Apprentice, first year	20	-------	23.5	26.6	24.2	24.1
Apprentice, second year	25	-------	30.7	31.7	33.8	31.2
Apprentice, third year	20	-------	37.6	37.6	36.6	39.0
Apprentice, fourth year	17	-------	57.0	42.6	52.5	50.5
Patternmaker (metal)	42	72.9	75.5	78.5	75.3	76.4
Patternmaker (wood)	463	73.0	81.8	84.2	84.2	79.3
Females (different departments):						
Assembler	1,655	33.6	36.9	36.3	37.4	44.0
Inspector	251	32.4	32.5	32.5	32.5	36.9
Machine operator	693	39.7	35.2	39.0	38.5	40.1
Packer	210	-------	32.6	30.9	33.1	34.0
Winder	293	46.6	41.8	41.1	39.0	46.2
Maintenance and miscellaneous:						
Belt repair	39	-------	55.9	57.3	56.0	57.0
Carpenter (shop)	314	65.8	67.8	67.0	68.6	70.9
Chauffeur	238	-------	56.1	55.5	53.5	52.6
Electrician (shop)	492	63.7	63.7	64.1	65.9	64.6
Janitor	312	-------	41.2	40.2	41.1	41.2
Laborer (outside common)	2,483	-------	47.4	43.4	45.2	43.6
Millwright	371	62.2	65.2	64.5	63.6	66.3
Oiler	94	-------	49.7	50.5	50.4	47.9
Packer and shipper	697	46.3	54.2	51.7	54.0	53.0
Painter	314	56.1	64.1	59.5	61.4	59.9
Pipe fitter	560	59.6	57.7	62.0	62.6	67.4
Stock-room clerk	385	44.5	49.1	48.1	51.3	51.0
Time clerk	298	44.5	48.7	48.0	48.2	49.7
Watchman (day)	116	34.4	43.0	40.5	39.0	39.6
Watchman (night)	287	34.4	37.8	39.4	40.5	41.8
Welder (acetylene)	449	70.3	70.4	64.4	67.1	67.3
Welder (electric arc)	120	70.3	66.4	69.4	72.7	77.7
Welder (electric spot)	554	-------	61.0	61.8	65.5	65.4
Power plant:						
Engineer	119	64.3	61.7	60.8	62.6	63.7
Fireman	478	58.9	54.5	55.2	55.5	53.1
Brass foundry:						
Apprentice molder, first year	6	-------	26.4	27.0	25.0	28.3
Apprentice molder, second year	3	-------	41.0	33.0	-------	43.0
Apprentice molder, third year	2	-------	45.0	51.0	49.6	47.0
Apprentice molder, fourth year	4	-------	51.0	61.0	-------	42.0
Chipper	12	-------	52.5	50.1	56.1	55.8
Coremaker (female)	10	32.8	40.7	43.7	43.7	45.4
Coremaker (male)	31	71.2	77.0	78.3	82.3	78.2
Crane operator (traveling)	-------	-------	52.3	53.7	55.0	-------
Flask repairer	-------	-------	63.8	71.0	-------	-------
Furnace tender	38	-------	56.1	63.5	65.1	64.6
Grinder (rough)	27	-------	47.1	46.4	49.0	46.3
Laborer (inside common)	129	-------	44.5	43.4	47.4	46.0
Molder, bench	58	-------	81.1	83.8	85.8	84.0
Molder, floor	25	78.4	91.2	92.8	90.3	91.8

TABLE 3.—AVERAGE EARNINGS PER HOUR IN METAL TRADES IN PHILADELPHIA AND VICINITY—Continued

Department and occupation	Total employees, October, 1926	Average hourly earnings				
		April, 1920	October, 1924	April, 1925	April, 1926	October, 1926
		Cents	*Cents*	*Cents*	*Cents*	*Cents*
Brass foundry—Continued.						
Molder, roll-over machine	1	.....	63.0	78.8	70.0	100.0
Molder, squeeze machine	27	.....	67.1	69.1	69.4	71.6
Molders' helper	12	.....	46.7	46.1	49.3	47.7
Sand-blast operator	2	.....	53.0	48.0	51.0	48.0
Shake-out	1	.....	41.0	41.0	43.0	49.0
Iron and steel foundry:						
Apprentice molder, first year	30	.....	32.8	34.8	33.5	34.1
Apprentice molder, second year	11	.....	40.5	39.3	41.9	39.4
Apprentice molder, third year	12	.....	50.6	49.6	50.1	54.3
Apprentice molder, fourth year	11	.....	58.6	65.0	63.7	64.5
Chipper	202	.....	53.3	56.2	55.3	54.4
Coremaker (female)	24	32.8	38.7	40.6	41.5	38.4
Coremaker (male)	151	71.2	73.1	81.4	79.8	82.8
Crane operator (traveling)	55	.....	56.1	56.6	56.9	57.6
Cupola charger	47	.....	48.3	50.0	48.1	52.4
Cupola tender	36	53.2	60.4	62.2	65.9	65.7
Flask repairer	37	.....	57.7	55.2	57.0	60.6
Grinder (rough)	44	.....	52.4	49.1	55.2	49.4
Laborer (inside common)	345	.....	43.9	45.0	46.9	46.5
Molder, bench	159	.....	91.4	87.7	86.0	89.9
Molder, floor	453	81.3	86.6	87.7	87.5	91.2
Molder, roll-over machine	82	.....	63.7	84.8	81.5	73.3
Molder, squeeze machine	95	.....	77.3	82.3	77.1	76.7
Molders' helper	171	.....	48.8	45.7	45.1	46.4
Sand-blast operator	36	.....	52.2	50.6	53.0	52.1
Shake-out	46	.....	50.6	48.3	50.9	52.0

Average Annual Wages in West Virginia, 1925

THE following table, reproduced from the Eighteenth Biennial Report of the West Virginia Bureau of Labor, 1925–1926, shows the average annual wages in West Virginia in the calendar year 1925 in various industries, as contrasted with the preceding 12 months.

AVERAGE ANNUAL WAGES IN WEST VIRGINIA, 1924 AND 1925

Industry	Average annual wages		Industry	Average annual wages	
	1924	1925		1924	1925
Automobiles sales and service	$1,468	$1,567	Ice cream	$1,105	$1,666
Bakeries	1,383	1,439	Iron and steel products	1,570	1,683
Brick and tile	1,170	1,069	Laundries	976	968
Brooms	.....	408	Lumber and lumber products	1,343	1,312
Candy	1,205	1,254	Mattresses	1,747	1,610
Carbon black	1,296	1,411	Meat packing	1,695	1,693
Caskets	1,357	1,323	Monuments	1,607	1,402
Chemicals	1,400	1,578	Oil well supplies	1,384	1,463
Chinaware and porcelain	1,290	1,244	Paint	1,428	1,272
Clothing and cloth products	742	758	Paper, pulp, and paper products	1,270	1,317
Dairy products	1,377	1,702	Printing and publishing	1,758	1,596
Dry cleaning and pressing	1,186	1,297	Railway repair shops	1,542	1,560
Dry docks	1,556	1,541	Sand, cement, and concrete blocks	1,418	1,468
Electrical equipment and repairs	1,394	1,603	Sheet-metal work	1,576	1,655
Flour and feed	1,517	1,572	Soft drinks	1,143	1,477
Food products	734	664	Tanneries and leather goods	996	1,188
Foundries and machine shops	1,550	1,550	Tobacco and cigars	1,543	1,250
Gas	1,315	1,465	Water and electricity	1,472	1,496
Gasoline	1,735	1,523			
Glass and glassware	1,191	1,142	Average all industries	1,383	1,409
Ice	1,434	1,462			

It will be noted that in 1925, as compared with 1924, annual wages were increased in 22 of the industries listed above and decreased in 15. There was no change in the average annual wage in foundries and machine shops. Among the industries in which there was an advance in wages were basic manufactures, such as iron and steel products, chemicals, electrical equipment and repair, and oil-well supplies.

In 1925 the lowest average yearly wage (not including the broom industry) was $664, reported for food products, while the next lowest average—$758—was for clothing and cloth products. Wages in laundries, where women are so largely employed averaged $976 in 1924 and $968 in 1925.

In 1926, of the 109,525 employees in West Virginia, 13,911, or nearly 13 per cent, were women. According to the 1920 census the percentage of gainfully employed females 10 years of age and over in the United States was 21.1 per cent. The commissioner calls attention to the fact that "West Virginia is one of only five States that have no laws regulating the employment of women in industry, they being on the same basis as men as far as the statutes govern."

Wages and Hours of Labor in Sydney and Melbourne, June, 1926

THE table below, compiled from data furnished in mimeographed form by the Australian Commonwealth Bureau of Census and Statistics, shows the minimum weekly rates of wages and ordinary hours of labor for adult workers in the occupations specified, in Sydney (New South Wales) and Melbourne (Victoria), as of June 30, 1926. The wage rates are those of the latest award, determination or agreement in force at that date.

MINIMUM WEEKLY RATES OF WAGES AND HOURS OF LABOR OF ADULT WORKERS IN SPECIFIED OCCUPATIONS IN SYDNEY AND MELBOURNE, JUNE 30, 1926

[Shilling at par = 24.3 cents; penny = 2.03 cents; exchange rate about par]

Sex and occupation	Sydney		Melbourne	
	Wages	Hours	Wages	Hours
Males				
Cabinetmakers	s. d. 101 9	44	s. d. 108 6	48
Sawyers, band or jig	108 6 to 110 6	44	100 6 to 106 6	44
Sawyers, circular	100 6 to 108 6	44	98 6 to 104 6	44
Boiler makers	119 6	48	112 6	48
Boiler makers' helpers	102 0	48	98 6	48
Boiler makers' laborers	96 0	48	92 6	48
Brass finishers	114 6	48	112 6	48
Brass molders	105 6 to 109 6	44	104 6 to 112 6	48
Electric linemen	109 0	44	105 0	48
Electric wiremen	109 0	44	107 0	48
Blacksmiths	114 6	48	112 6	48
Coppersmiths	114 6	48	112 6	48
Pattern makers	123 6	48	121 6	48
Core makers, iron	109 6	44	97 6 to 117 6	48
Molders, iron	105 6 to 119 6	44	97 6 to 117 6	48

MINIMUM WEEKLY RATES OF WAGES AND HOURS OF LABOR OF ADULT WORKERS IN SPECIFIED OCCUPATIONS IN SYDNEY AND MELBOURNE, JUNE 30, 1926—Con.

Sex and occupation	Sydney		Melbourne	
	Wages	Hours	Wages	Hours
Males—Continued	s. d.		s. d.	
Sheet metal machinists	84 6 to 90 6	44	98 6	48
Board hands, bakeries	102 6	44	120 0	48
Ovenmen, bakeries	107 6	44	120 0	48
Shoemakers	98 6	44	98 6	44
Cutters, custom-made clothing	110 0	44	114 6	44
Pressers, custom-made clothing	104 6	44	104 6	44
Tailors, custom-made clothing	104 6	44	104 6	44
Cutters, ready-made clothing	100 0	44	104 6	44
Pressers, coat, ready-made clothing	104 6	44	104 6	44
Tailors, ready-made clothing	104 6	44	104 6	44
Carders, woolen textiles	85 0	44	84 0	48
Dyehousemen, woolen textiles	85 6	44	84 0	48
Scourers, woolen textiles	84 6	44	84 0	48
Spinners, woolen textiles	84 6	44	85 0	48
Compositors, newspaper:				
Daywork	114 0	44	127 6	44
Nightwork	124 0	42	140 0	44
Machinists, newspaper:				
Daywork	114 0	44	117 7	44
Nightwork	124 0	42	135 3	42
Proofreaders, newspaper:				
Daywork	119 0	44	127 6	44
Nightwork	134 0	42	130 0	44
Stereotypers, newspaper:				
Daywork	106 6	44	111 9	44
Nightwork	111 6	42	122 1	42
Compositors, job work	112 0	44	112 0	48
Linotype operators, job work	124 0	44	126 0	44
Machinists, job work	112 0	44	112 0	48
Proofreaders, job work	118 0	44	118 0	48
Stereotypers, job work	112 0	44	112 0	48
Wheelwrights	113 0	48	110 6	48
Bricklayers	113 1	44	123 9	44
Carpenters	121 0	44	121 11	44
Masons	120 0	40	120 0	44
Painters	108 2	44	113 8	44
Paperhangers	108 2	44	113 8	44
Plasterers	108 4	44	123 9	44
Plumbers	117 0	44	121 0	44
Engineers, stationary, first-class	103 0 to 106 0	48	102 0 to 105 0	48
Engineers, stationary, second-class	100 0 to 103 0	48	99 0 to 102 0	48
Firemen, stationary, first-class	97 0	48	99 0	48
Firemen, stationary, second-class	94 0 to 95 6	48	91 6 to 96 0	48
Females				
Shoe operatives	49 6	44	49 6	44
Dressmakers	47 6 to 68 6	44	47 6 to 68 6	44
Milliners	47 6 to 50 6	44	47 6 to 50 6	44
Shirt makers	47 6 to 57 6	44	47 6 to 57 6	44
Machine operators, custom-made clothing:				
Coat	57 6	44	57 6	44
Trousers and vest	52 6	44	52 6	44
Tailoresses, custom-made clothing:				
Coat	57 6	44	57 6	44
Trousers and vest	52 6	44	52 6	44
Machine operators, ready-made clothing:				
Coat	52 6	44	52 6	44
Trousers and vest	50 6	44	50 6	44
Tailoresses, ready-made clothing:				
Coat	52 6	44	52 6	44
Trousers and vest	49 0	44	49 0	44
Comb-minders, woolen textiles	45 9	44	42 0	48
Drawers and menders, woolen textiles	49 9 to 54 9	44	42 0	48
Warpers, woolen textiles	49 9 to 54 9	44	45 6	48
Weavers, loom, woolen textiles	54 9	44	46 0	48

A comparison of these figures with similar data as of December 31, 1925, given in the Labor Review for August, 1926 (p. 116), shows that there has been a decided rise in the wage level for both cities. Considering only the male workers, there are 54 different occupations reported. In Sydney 26 of these groups received an increase of wages during the six months covered, 1 suffered a reduction, and 27 had no change; in Melbourne, 33 groups received increases, none received any reduction, and 21 had the same wage rates at the end as at the beginning of the period. In Sydney the greatest gains were made by the coat pressers and tailors in the ready-made clothing trade, and by the stationary engineers and firemen, both of the first and second class, all of whom received an increase of 3s. per week. In Melbourne the largest increases were received by the cutters, pressers, and tailors in both the ready-made and custom-made clothing industries, all of whom gained 3s. per week; by the boiler makers' laborers, who received an increase of 5s.; by the plasterers, who at the end of 1925 had a wage ranging from 110s. to 118s. 3d. per week, which by the end of June had been replaced by a uniform wage of 123s. 9d.; and by the painters and paperhangers, who had made a gain of 9s. 2d. per week. In many of the other trades, the increases received were not over a shilling a week.

Of the 16 occupations of adult women whose wage rates are given, 13 in Sydney and 12 in Melbourne received advances, and none suffered reductions. For the most part the increases did not exceed 1s. 6d. per week, but the shoe operatives in both cities received an increase of 2s. 9d.

In Melbourne hours of work remained unchanged during the period covered. In Sydney 18 groups of male and 4 groups of female workers had a reduction of weekly hours. At the end of 1925, of the 54 industrial groups of male workers, 25 had a 48-hour week (in two of these cases the hours were from 46¼ to 48), 5 had 46 hours, 19 had 44 hours, 4 had 42, and 1 had 40; at June 30, 1926, only 12 had a 48-hour week, 37 had 44 hours, and the 42 and 40 hour groups were unchanged. These changes were due to the 44-hour law of New South Wales, which became effective on January 1, 1926. Under its terms the ordinary working hours in all industries, except coal mining and the rural industries, were fixed at 44 per week. This was at once enforced for those working under State awards or agreements, but for those working under Federal awards which had fixed a 48-hour week, the situation was not so clear. The matter was carried up to the High Court of Australia, which held that the State law was inapplicable to those working under Federal awards, but the workers were not satisfied to accept this verdict, and at June 30, the matter was still being contested.

Basic Wage and Family Endowment in New South Wales

ON DECEMBER 15, 1926, the Industrial Commissioner for New South Wales announced that the basic wage for adult males would remain the same as that fixed in August, 1925, which was £4 4s.[1] a week, and that the announcement of the basic

[1] Pound at par=$4.8665, shilling=24.3 cents, penny=2.03 cents; exchange rate about par.

wage for females would be deferred. This announcement was coupled with a recommendation to the Government that a scheme of family endowment should be made an adjunct to the living wage. According to a report received from the United States consul, W. Maynard Stapleton, at Sydney, the Government accepted the recommendation and on December 23 "approved a scheme, subsequently indorsed by the labor caucus, providing for an endowment of 6s. per week for each child up to 14 years of age and applying to all employees receiving wages up to £750 per annum. The endowment will be retrospective to December 15, the date of the commission's declaration; and it is expected that it will mean an increased cost to the State and employers of £7,000,000 per annum."

The employers' representatives on the commission had contended that the new basic wage ought to be fixed at £3 18s. 6d. per week, while the employees' representatives had claimed that it should be £6 10s. a week.

The industrial commission is empowered by the arbitration act of 1926 to determine, not oftener than once every six months, a standard of living, and to declare what shall be the living wage based upon that standard for adult males and females. In announcing the new wage, the industrial commissioner stated that the obvious intention of the act was that what might be called an Australian standard should be determined by ordinary methods of investigation, and that this standard should be one and the same throughout the whole zone of industrial life. This purpose could not be achieved by fixing one wage to apply to every worker, regardless of his circumstances. Different wages were needed to maintain the same standard of living, according to whether the recipient was a man or a woman, or with or without a family. The standard of living wage for a hypothetical domestic unit of five persons, consisting of husband, wife, and three children under 14, might be set at £5 6s. a week. The basic wage of £4 4s. a week, plus 6s. for each child under 14, would bring the weekly income of this hypothetical family very close to the amount estimated as necessary to maintain the Australian standard.

To finance the hypothetical rate of 6s. per week per child, a contribution of 6 per cent of the existing wages bill would be necessary. Taking the present living wage of £4 4s. per adult male and £2 2s. 6d. per adult female, the percentage charged would be the equivalent of a payment of 5s. weekly for each male employee, and 2s. 6d. for each female, with similar amounts proportionate to the wages paid to juniors and to those above the basic wage.

Brazilian Decree Regulating Workers' Vacations[1]

ON OCTOBER 30, 1926, the President of Brazil signed the regulations providing for holidays for salaried employees and wage earners in commercial, industrial, and other business establishments. These regulations interpret law No. 4,982, of December 24, 1925, by the terms of which an annual paid vacation of 15 days is granted to such workers. The outstanding provisions of the regulations are as follows: The right to a vacation of 15 working-days will be granted after 11 months' continuous service in the same

[1] Correio da Manha, Rio de Janeiro, Brazil, July 13, 1926, and Pan American Union Bulletin, Washington, February, 1927, pp. 181, 182.

establishment to employees and operatives throughout Brazil in commercial, banking, and industrial undertakings, transportation and communication services, public and private charitable institutions, and in journalistic enterprises.

The following classes of persons are not considered as salaried employees or wage earners for the purposes of these regulations: Persons working on a commission basis on their own account for several employers, or on piece or job rates, outside the establishment employing them, or those engaged in such work who receive their pay directly from the persons employing them.

Days away from employment because of sickness or other unavoidable causes are not to be deducted from the vacation of 15 working-days. Those working by the day or piece will be paid for 15 working-days, while salaried employees will receive half a month's pay. Employees must be informed in writing a week in advance of the time allotted to them for this vacation, which may be granted in whole or in part.

The National Labor Council, which is the advisory organ of the Government in questions of labor organization and social welfare, is intrusted with the supervision of the execution of these regulations. A fine of 50 to 2,000 milreis [2] is the penalty for the violation of this law. Appeals against fines or other measures imposed by the supervisory officials may be lodged with the National Labor Council.

Wages and Hours of Labor in Canada, 1926

THE following statistics are taken from a report on wages and hours of labor in Canada, 1920 to 1926, published as a supplement to the January, 1927, issue of the Canadian Labor Gazette (Ottawa):

TABLE 1.—INDEX NUMBERS OF RATES OF WAGES FOR VARIOUS CLASSES OF LABOR IN CANADA, 1920 TO 1926

[1913=100]

Industry group	1920	1921	1922	1923	1924	1925	1926
Building trades	180.9	170.5	162.5	166.4	169.7	170.4	172.1
Metal trades	209.4	186.8	173.7	174.0	175.5	175.4	177.4
Printing trades	184.0	193.3	192.3	188.9	191.9	192.8	193.3
Electric railways	194.2	192.1	184.4	186.2	186.4	187.8	188.4
Steam railways	186.6	165.3	155.1	157.4	157.4	157.4	158.9
Coal mining	197.7	208.3	197.8	197.8	192.4	165.1	165.1
Average, 6 groups	192.1	186.1	176.8	178.4	179.3	174.8	175.9
Common factory labor	215.3	190.6	183.0	181.7	183.2	186.3	187.3
Miscellaneous factory trades	216.8	202.0	189.1	196.1	197.6	195.5	196.7
Logging and sawmilling	202.7	152.6	158.7	170.4	183.1	178.7	180.8

[2] The exchange rate of the milreis is about 11.9 cents.

TABLE 2.—RATES OF WAGES PER HOUR AND HOURS OF LABOR PER WEEK IN VARIOUS OCCUPATIONS IN SPECIFIED CANADIAN CITIES, 1925 AND 1926

Occupation	Quebec		Montreal		Ottawa	
	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week
Building trades						
Bricklayers:						
1925	$0.90	54	$1.00	44–50	$1.10	44
1926	.90	54	1.00	50	1.10	44
Carpenters:						
1925	.45 –.55	54–60	.65 –.75	44–60	.75	44
1926	.45 –.55	54–60	.65 –.75	44–60	.75	44
Electrical workers:						
1925	.45 –.55	54	.60 –.70	44–46½	.70–.80	44
1926	.45 –.55	54	.60 –.70	44–46½	.80	44
Painters:						
1925	.40 –.60	48–54	.60 –.70	44–49½	.65	44
1926	.40 –.60	48–54	.60 –.70	44–49½	.65	44
Plasterers:						
1925	.85	54	1.00	44	.85	44
1926	.85	54	1.00 –1.12½	44–49½	.85	44
Plumbers:						
1925	.45 –.60	54–57	.70 –.75	44–49½	.85–.90	44
1926	.45 –.60	54–57	.70 –.75	44–49½	.85–.90	44
Stonecutters:						
1925	.45 –.60	54	.75	44	1.00	44
1926	.45 –.60	54	.75	44	1.00	44
Laborers:						
1925	.35 –.45	54–60	.30 –.40	50–60	.45–.50	44–54
1926	.30 –.40	54–60	.30 –.40	50–60	.45–.50	44–54
Metal trades						
Blacksmiths:						
1925	.50 –.60	45–54	.52½–.70	44–58	.51–.65	44–50
1926	.50 –.60	50–54	.52½–.70	44–58	.51–.65	44–50
Boilermakers:						
1925	.40 –.50	49½	.50 –.72½	47–58	.61–.75	44–50
1926	.40 –.50	49½	.50 –.75	47–58	.61–.75	44–50
Machinists:						
1925	.40 –.55	45–60	.50 –.75	44–58	.50–.65	44–50
1926	.40 –.55	45–50	.50 –.75	44–58	.50–.65	44–50
Iron molders:						
1925	.37½–.57	60	.60 –.75	40–50	.50–.60	50
1926	.37½–.57	60	.60 –.75	40–55	.50–.60	50
Sheet-metal workers:						
1925	.45 –.55	55	.50 –.70	44	.80	44
1926	.45 –.55	54	.50 –.70	44–49½	.83	44
Electric street railway						
Conductors and motormen:						
1925 [1]	.45	60	.51	70	[2] .50	54
1926 [1]	.45	60	.51	70	[2] .50	54
Linemen:						
1925	.43–.45	60	.51	60	.50	54
1926	.43–.45	60	.51	60	.50	54
Shedmen:						
1925	.35–.53	53½–77	.34 –.52	63–70	.35–.51	54
1926	.30–.53	53½–77	.34 –.52	63–70	.39–.51	54
Electricians:						
1925	.43–.48	53½	.51 –.63	50	.52	54
1926	.43–.48	53½	.51 –.63	50	.52	54
Trackmen and laborers:						
1925	.35	53½	.35	60	.43–.46	54
1926	.30	53½	.35	60	.44–.46	54
	Wages per week	Hours per week	Wages per week	Hours per week	Wages per week	Hours per week
Printing trades						
Compositors, machine and hand, news:						
1925	$29.00	48	$38.00–40.00	48	$41.00	46½
1926	29.00	48	38.00–40.00	48	42.00	46½
Compositors, machine and hand, job:						
1925	29.00	48	36.00	44–48	35.00	44–48
1926	29.00	48	36.00	44–48	35.00–40.00	44–48

[1] Maximum rates.

[2] One-man car operators, 5 cents extra per hour.

TABLE 2.—RATES OF WAGES PER HOUR AND HOURS OF LABOR PER WEEK IN VARIOUS OCCUPATIONS IN SPECIFIED CANADIAN CITIES, 1925 AND 1926—Contd.

Occupation	Quebec		Montreal		Ottawa	
	Wages per week	Hours per week	Wages per week	Hours per week	Wages per week	Hours per week
Printing trades—Continued						
Pressmen, news:						
1925	$28.00	48	$36.00	48	$40.00	48
1926	28.00	48	36.00	48	40.00	48
Pressmen, job:						
1925	27.00	48	36.00	48	35.00	44-48
1926	27.00	48	36.00	48	35.00-38.00	44-48
Bookbinders:						
1925	26.50	48	36.00	48	34.00	48
1926	26.50	48	36.00	48	34.00	48
Bindery girls:						
1925	8.00	48	14.50	48	13.50	48
1926	8.00	48	15.00	48	13.50	48

Occupation	Toronto		Winnipeg		Vancouver	
	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week
Building trades						
Bricklayers:						
1925	$1.12½	44	$1.25	44	$1.12½	44
1926	1.12½	44	1.35	44	1.12½	44
Carpenters:						
1925	.80 -.90	44	.85	44	.87½	44
1926	.80 -.90	44	1.00	44	.93¾	44
Electrical workers:						
1925	.80	44	.85	44	.85 -.90	44
1926	.80	44	1.00	44	.85 -.90	44
Painters:						
1925	.65 -.75	44	.75	44	.81¼	44
1926	.65 -.75	44	.85	44	.87½	44
Plasterers:						
1925	1.25	44	1.07½	44	1.12½	40
1926	1.25	44	1.25	44	1.18¾	40
Plumbers:						
1925	1.00	44	1.00	44	1.00	40-44
1926	1.00	44	1.12½	44	1.05	40-44
Stonecutters:						
1925	1.00	44	1.00	44	1.00	40-44
1926	1.00	44	1.10 -1.12½	44	1.00	40-44
Laborers:						
1925	.35 -.65	44-60	.35 -.50	50-60	.45 -.56¼	44
1926	.35 -.65	44-60	.40 -.50	50-60	.45 -.56¼	44
Metal trades						
Blacksmiths:						
1925	.50 -.65	44-50	.60 -.80	44-50	.71¼-.87½	44
1926	.50 -.65	44-50	.60 -.80	50	.75 -.87½	44
Boilermakers:						
1925	.60 -.75	44-48	.60 -.72	50	.71¼-.88	44
1926	.60 -.75	44-48	.60 -.72	50	.75 -.87½	44
Machinists:						
1925	.50 -.70	44-54	.60 -.80	44-50	.71¼-.81¼	44
1926	.50 -.70	44-54	.60 -.80	48-50	.75 -.81¼	44
Iron molders:						
1925	.50 -.70	45-54	.55 -.70	50	.71¼-.81¼	44
1926	.50 -.70	45-54	.55 -.70	50	.75 -.81¼	44
Sheet-metal workers:						
1925	.50 -.80	44-50	.60 -.80	44-50	1.00	44
1926	.50 -.90	44-50	.60 -.90	44-50	1.00	44
Electric street railway						
Conductors and motormen:						
1925	.60	48	.56	50	[1].62	48
1926	.60	48	.57	50	[1].62	48
Linemen:						
1925	.72 -.78	44	.80	44	.93¾	44
1926	.72 -.78	44	.89	44	.93¾	44

[1] One-man car operators, 6 cents extra per hour.

TABLE 2.—RATES OF WAGES PER HOUR AND HOURS OF LABOR PER WEEK IN VARIOUS OCCUPATIONS IN SPECIFIED CANADIAN CITIES, 1925 AND 1926—Contd.

Occupation	Toronto		Winnipeg		Vancouver	
	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week
Electric street railways—Con.						
Shedmen:						
1925	$0.54 -.56	48	$0.50½-.58	40	$0.55 -.65	44-48
1926	.54 -.56		.50½-.58	40	.55 -.65	44-48
Electricians:						
1925	.55 -.60	44	.61	40	.74	44
1926	.55 -.60	44	.60	40	.74	44
Trackmen and laborers:						
1925	.45 -.59	48	.35 -.50	44	.51½-.56	44
1926	.45 -.59	48	.35 -.50	44	.51½-.56	44
	Wages per week	Hours per week	Wages per week	Hours per week	Wages per week	Hours per week
Printing trades						
Compositors, machine and hand, news:						
1925	$41.50	46½	$42.32	46	$45.00	45
1926	42.50	46½	44.00	46	45.00	45
Compositors, machine and hand, job:						
1925	35.20-36.00	44-48	39.60	44	42.00	44-48
1926	35.20-36.00	44-48	39.60	44	42.00	44-48
Pressmen, news:						
1925	40.00	48	42.00	48	45.00	48
1926	40.00	48	43.75	48	45.00	48
Pressmen, job:						
1925	36.00	48	39.60	44	42.00	44-48
1926	36.00	48	39.60	44	42.00	44-48
Bookbinders:						
1925	36.00	48	36.00	48	42.00	44-48
1926	36.00	48	38.00	48	42.00	44-48
Bindery girls:						
1925	16.80	48	15.00	48	21.00	44-48
1926	16.80	48	15.00	48	21.00	44-48

TABLE 3.—RATES OF WAGES AND HOURS OF LABOR OF EMPLOYEES ON CANADIAN STEAM RAILWAYS, 1923, 1924, 1925, AND DECEMBER, 1926

[Rates for running trades and dispatchers and telegraphers in British Columbia are slightiy higher that above. Where ranges are shown for dispatchers and telegraphers, the lower rate is that paid east of Fort William, and the higher rate is that paid west of Fort William to British Columbia.]

Occupation	Unit	1923, 1924, 1925		December, 1926	
		Wages	Hours per week	Wages	Hours per week
Conductors, passenger	100 miles	$4.27	(1)	$4.47	(1)
Conductors, freight (irregular)	do	5.80	(2)	6.16	(2)
Brakemen, passenger	do	2.93	(1)	3.13	(1)
Brakemen, freight (irregular)	do	4.48	(2)	4.84	(2)
Baggagemen, passenger	do	3.04	(1)	3.24	(1)
Engineers, passenger	do	6.00	(1)	6.00	(1)
Engineers, freight (irregular)	do	6.64	(2)	6.64	(2)
Firemen, passenger	do	4.84	(1)	4.48	(1)
Firemen, freight (irregular)	do	4.88	(2)	4.88	(2)
Dispatchers	Month	230.00-238.00	48	230.00-238.00	48
Telegraphers	do	117.00-128.00	48	117.00-128.00	48
Maintenance of way:					
Foremen on line	Day	4.40	48	4.40	48
Sectionmen on line	do	3.04	48	3.04	48
Car and shop trades:					
Blacksmiths	Hour	.70	44	.70	44
Boilermakers	do	.70	44	.70	44
Machinists	do	.70	44	.70	44
Molders	do	.70	44	.70	44
Carpenters, freight	do	.63	44	.63	44
Painters, freight	do	.63	44	.63	44
Repairers, freight	do	.63	44	.63	44
Cleaners	do	.38	44	.38	44

[1] Basis of 20 miles per hour, 150 miles per day. [2] Basis of 12½ miles per hour, 8 hours per day.

TABLE 4.—WAGES AND HOURS OF LABOR OF EMPLOYEES IN COAL MINING IN CANADA, NOVEMBER 1924, AND SEPTEMBER 1925, AND 1926

Occupation	November, 1924		September, 1925		September, 1926	
	Daily wages	Hours per day	Daily wages	Hours per day	Daily wages	Hours per day
Nova Scotia						
Contract miners	$7.00	8	$6.25	8	$6.35	8
Hand miners	4.60	8	4.30	8	4.15	8
Hoisting engineers	4.60	8	4.35	8	4.15	8
Drivers	3.90	8	3.60	8	3.60	8
Brattice men	4.05	8	3.75	8	3.65	8
Pump men	4.30	8	4.00	8	3.90	8
Laborers, underground	3.65	8	3.35	8	3.35	8
Laborers, surface	3.50	8½	3.25	8½	3.25	8½
Machinists	4.60	8½	4.35	8½	4.15	8½
Carpenters	4.25	8½	4.00	8½	3.85	8½
Blacksmiths	4.35	8½	4.10	8½	4.00	8½
Alberta						
Contract miners	8.33	8	7.00	8	7.00	8
Machine miners	7.02	8	5.65–7.00	8	5.65–7.00	8
Hand miners	6.56	8	5.00–5.40	8	5.00–5.57	8
Hoisting engineers	6.47	8	5.50–6.00	8	5.50–6.00	8
Drivers	6.31	8	4.70–4.90	8	4.70–5.25	8
Brattice men	6.56	8	5.20–5.40	8	5.20–5.57	8
Pump men	6.03	8	4.25–4.75	8	4.25–4.75	8
Laborers, underground	6.03	8	4.25–4.45	8	4.25–4.67	8
Laborers, surface	5.76	8	4.00–4.20	8	4.00–4.20	8
Machinists	7.12	8	4.70–5.50	8	4.70–5.71	8
Carpenters	7.12	8	5.30–5.50	8	5.30–5.77	8
Blacksmiths	7.12	8	5.30–5.50	8	5.30–5.77	8
Vancouver Island						
Contract miners	7.00	8	6.50	8	6.50	8
Machine miners	5.34	8	4.81	8	4.81	8
Hand miners	5.05	8	4.52	8	4.52	8
Hoisting engineers	5.92	8	5.39	8	5.39	8
Drivers	4.58	8	4.13	8	4.13	8
Brattice men	4.87	8	4.35	8	4.35	8
Pump men	4.38	8	3.96	8	3.96	8
Laborers, underground	4.36	8	3.97	8	3.97	8
Laborers, surface	4.11	8	3.76	8	3.76	8
Machinists	5.95	8	5.40	8	5.40	8
Carpenters	5.37	8	4.83	8	4.83	8
Blacksmiths	5.64	8	5.11	8	5.11	8

Changes in English Wage Rates in 1926

THE Ministry of Labor Gazette (London) publishes in its issue for January, 1927, a summary of the changes in wage rates and hours of labor during the year 1926, calling attention to the fact that the number of workpeople affected by changes in rates of wages, and the net effect of these changes on the general level of wages, were smaller than in any year since 1914.

The Government receives regular reports as to wage changes for the leading industries, excluding workers employed as agricultural laborers, Government employees, domestic servants, shop assistants, and clerks.

In the industries and services for which statistics are available the changes reported during the year resulted in an aggregate net increase of nearly £120,000[1] in the full-time weekly wages of 420,000 workpeople, and in a net decrease of over £81,000 in those of 740,000 workpeople. In 1925 there were net increases amounting to over £80,000 a week in the wages of about 870,000 workpeople and net decreases amounting to nearly £160,000 a week in those of 850,000 workpeople.

[1] Pound at par=$4.8665; exchange rate about par.

The following table shows the number of workpeople affected by the changes in rates of wages reported to the department in 1925 and 1926, and the net amount of the change in their weekly rates of wages, in each of the principal groups of industries for which statistics are available:

CHANGES IN AMOUNTS PAID IN WAGES IN GREAT BRITAIN, 1925 AND 1926, BY INDUSTRY GROUP

[Pound at par=$4.8665; exchange rate about par]

Industry group	Approximate number of workers affected				Increase or decrease in amount paid in wages	
	1925		1926			
	Increases	Decreases	Increases	Decreases	1925	1926
Mining and quarrying	9,000	404,000	210,000	236,000	−£67,050	+£52,600
Brick, pottery, glass, chemical, etc	30,000	1,150	5,600	1,000	+4,550	+690
Iron and steel	19,000	162,000	61,000	66,000	−34,550	−3,600
Engineering, shipbuilding, and other metal	38,500	38,000	6,000	34,000	−550	−4,100
Textile	62,500	59,000	10,000	126,000	+100	−6,500
Clothing	218,000	6,350	7,250	2,600	+21,140	+530
Food, drink, and tobacco	23,750	10,500	28,000	15,500	+960	+720
Woodworking, etc	5,750	4,250	650	5,000	+240	−440
Paper, printing, etc	10,500	500	17,500	50	+1,660	+2,100
Building and allied industries	43,500		41,000	100	+5,000	+7,000
Transport	210,000	151,000	2,000	194,000	−27,400	−9,900
Public-utility services	172,000	7,750	18,000	56,000	+15,600	−2,000
Other	30,500	6,500	10,000	2,750	+2,200	+400
Total	873,000	851,000	417,000	739,000	−78,100	+37,500

Attention is called to the fact that these changes relate to wage rates and not to earnings, the latter being affected in varying degrees in the different industries by the amount of unemployment during the year. The principal industry showing an increase in wage rates was coal mining, in which rates were raised after the strike in Nottinghamshire, Derbyshire, Leicestershire, Warwickshire, Cannock Chase, North and South Staffordshire, and the Forest of Dean. In other districts mining wage rates were reduced, the changes in both cases being coincident with an increase in working hours.

The principal other bodies of workpeople whose wages were increased in 1926 included iron miners and blast-furnace workers in Cleveland, iron puddlers and iron and steel millmen in the Midlands, paper makers (except the higher-paid men), building-trade operatives in the Liverpool district, workers engaged in civil engineering construction, and electricity-supply workers in London.

The principal industries in which a reduction of wage rates took place were coal mining, iron and steel, the textile, and the transport industries. In the coal-mining industry there were reductions, when work was resumed after the stoppage, in Northumberland, Durham, Cumberland, North Wales, and the Radstock district. In the textile industries the principal reductions took place among the linen operatives in Northern Ireland, the carpet makers, and the bleachers and dyers.

Apart from the workers included in the table preceding, about 445,000 workpeople received increases and also suffered decreases in wages during 1926, which left their wage rates at the same level at

the end as at the beginning of the year. Also in a large number of cases weekly wage rates remained unchanged throughout the year.

When account is taken of all the information available to the department, it would appear that, at the end of 1926, weekly full-time rates of wages were at about the same level, on the average, as at the end of 1925, and about 75 per cent higher than in August, 1914. This estimate relates to rates of wages for a full normal week, and takes no account of changes in earnings resulting from alterations in the state of employment, the effect of which varied in different industries.

Methods by which Wage Changes were Arranged

THE total increases reported to the department amounted to about £193,500 a week, of which nearly £55,000 resulted from the operation of cost-of-living sliding scales, and over £25,000 from sliding scales dependent on selling prices of manufactured iron, steel, etc. Increases amounting to £3,600 were secured by arbitration, and others, amounting to £106,000 a week, were arranged by direct negotiations between employers and workpeople. "Of these, increases of £97,000 were preceded by disputes causing stoppage of work, the workpeople concerned being principally coal miners."

Of the total weekly reduction of £156,000, over £69,000 was due to the operation of cost-of-living sliding scales; this sum includes nearly £9,000 under scales embodied in trade board orders and £16,000 under scales arranged by joint industrial councils and other standing joint bodies of employers and workpeople. Under other agreements made by the latter there was a reduction of nearly £2,000. Sliding scales dependent on selling prices, etc., accounted for over £29,000. Of the remaining £56,000, £1,400 was the result of arbitration, and the rest, apart from a small sum (less than £500) under trade board orders other than those embodying a cost-of-living sliding scale, was the result of direct negotiation between employers and workpeople, including nearly £45,000 which took effect after disputes causing stoppage of work, most of the latter amount affecting coal miners.

Changes in Hours of Labor

THE approximate number of workpeople whose working hours were reduced during the year was 340, while hours were increased for 932,600. The aggregate net increase in weekly working hours was 3,972,000. The increase of hours was wholly among the coal miners, for whom the increase in working time averaged about 4½ hours a week.

Methods of Wage Fixing in Great Britain

THE Department of Commerce has recently issued a study of British wages in which considerable space is devoted to the methods by which wage rates are determined in the various trades and industries.[1] Among the most important methods discussed are the variation of wages by a sliding scale based either upon the cost-of-living index or upon selling prices or profits, awards by local wage boards and trade boards, and agreement by periodical negotiations between employers and employees.

[1] United States. Department of Commerce. Bureau of Foreign and Domestic Commerce. Trade promotion series No. 42: British wages, by Charles E. Lyon, Washington, 1926, pp. 1–41.

Sliding-Scale Method

THE use of the cost-of-living index as the basis of a sliding scale is a recent development, having come into use since the outbreak of the war. In general, wages tend to lag behind prices, no matter in which direction the change takes place, and when prices took their spectacular rise during the war, the cost-of-living index method was adopted as a means of trying to secure to the worker the same standard of living he had had while conditions were normal. The index used is that compiled by the Ministry of Labor, based upon the prices of July, 1914.

The base is July, 1914, rather than an average of pre-war years, as statistics were not available. The items are the usual five—food, rent, clothing, fuel and light, and miscellaneous (car fare, newspapers, tobacco, and certain household necessities). To secure a representative cost for workers the ministry examined budgets of some 2,000 working-class families throughout the country. The prices are those at retail, another index reporting wholesale prices. A system of weighting in accordance with relative importance of items is then applied in order to arrive at the final index figure.

A sliding scale based upon this index is used in upward of a hundred trades and services, ranging from the manufacture of brooms and brushes to the building and construction trades, textile and metal trades, transportation, public administration and the like. It is estimated that there are over 2,500,000 workers in trades in which the wages are regulated by this principle. In general, wage rates are fixed at a certain figure with the understanding that when the index changes by a certain number of points the rate shall rise or fall correspondingly. There is no uniformity among the different trades, however, as to the change in the index which is to cause a change in the wage rate. In the seed-crushing industry a revision of wage rates must follow a change in the index of 4 points, on the railways a change of 5 points is required, in electricity supply, a change of 6 points, and so on, "up to trades that call for 15-point variations before adjustment of wages." Neither is there any uniformity in the amount by which wage rates are to be varied when a change is made.

The use of the index does not, therefore, mean standardization of wages, and the principle leaves room for bargaining and controversy. The chief value of the plan is its usefulness at times of heavy inflation followed by severe depression, as from 1919 to 1921. According to the report, the chief defect lies in its failure to reflect the true living costs of all grades of workers in all parts of the country, but it has other weaknesses.

It takes no account of the psychology of a boom which places the workers on a different plane from that to which they had been accustomed; the automatic decline of the cost of living breaks their grip upon some of the advantages or semiluxuries in which they had indulged in more prosperous times and brings about a certain dissatisfaction which must be reflected in their work. In this connection it is important to note that the original purpose of the index as a guide to wages was to show the average increase in the cost of maintaining unchanged the pre-war standard of living of working-class families. The question is: Should this standard remain unchanged or should actual improvement be maintained? The question is in part answered by the fact that several trades once under the index principle have withdrawn.

The sliding scales based on selling prices and on profits do not differ in principle from those based on the cost-of-living index. The wages of approximately 1,500,000 workers are related to the selling price of the product, the plan being used in such important trades as coal mining, iron and steel industries, iron mining, limestone quarrying, and the manufacture of coke and of tin plate.

Wages Determined by Trade Boards

THE trade board movement began originally as a move in the fight against sweated labor.

In 1909 this took expression in the trade boards act, empowering boards consisting of representatives of employers, workers, and an appointed group of outsiders to set up minimum rates of wages which thereby became enforceable at law. The system applied in New Zealand and Victoria guided the original action when the wages in four trades, which were regarded as underpaid, were set. By 1918 the Whitley Council idea had so spread that a new act was passed empowering boards to set wages not only in trades where pay was regarded as too low, but also where there was no machinery for wage determination.

At present there are 50 trade boards in existence, covering 35 trades, and it is estimated that the wages of about 1,500,000 workers are controlled by their decisions. "There have been efforts to extend the application of the trade boards act until wages of some 5,000,000 workers are covered, but boards have not been set up in any new trades since November, 1921." At present, it is said, the wage boards appear to be functioning smoothly; their decisions as to wage changes are regularly reported in the official Labor Gazette, and although they are subject to some criticism, there is no agitation for a broad revision of their powers. They are described as "usually amicable and efficient," and the figures concerning the work of their force of 59 inspectors seem to show that their decisions are in general accepted without serious attempts at evasion.

During 1924, for example, 5,076 firms employing 88,706 workers were inspected, frequently as the result of complaints. There were 5,638 workers, employed by 1,546 firms, found to be underpaid; in addition, 1,210 firms had not posted notices, 1,307 did not keep proper record of wages, and 2,814 did not have adequate time records. In only 20 instances were legal proceedings taken, and the violations in these instances must have been rather flagrant, as convictions, with penalties, followed in every case.

In considering the work of the trade boards attention is called to the fact that these boards are designed especially to protect workers in trades of such minor importance that the strike weapon could not be brought into play successfully. One important result of their work which is often overlooked is its effect as an incentive to efficient management. Knowing that the minimum rates must be paid, and that it is not possible in bad times to reduce costs by cutting wages, the managers are forced to meet the situation by improving methods. "It is the incentive to efficient management which the payment of a minimum wage gives that is the most striking and perhaps the

most valuable feature of the work of the trade boards." The testimony of an expert before a committee of inquiry is quoted as follows:

That the enforcement of these minimum rates has resulted in most employers acquiring a greater knowledge of the details of their business is beyond question, and may properly be attributed to one or more of the following factors:

(*a*) Realization of the possibilities of increasing industrial efficiency by improved methods of working, thus maintaining rates of wages while reducing costs of production.

(*b*) Sympathy with the acts, and desire to carry out their provisions.

(*c*) Knowledge that noncompliance might incur liability for proceedings.

Lack of Uniformity in Wages and Wage-Fixing Methods

THE report stresses the innumerable variations both in methods of fixing British wages and in the wages themselves.

Through permutations and combinations of the above methods of determining wages, in one industry or another, many variations are in practice, with the result so often stressed in this study that no uniformity whatsoever prevails and no such thing as an average wage of the British laborer exists. Not only are there many ways of arriving at a basic wage, but a great variety of supplementary payments is practiced, resulting in a baffling distinction between weekly wages and weekly earnings.

To illustrate this diversity the report cites the monthly summary published in the Labor Gazette under the heading "Changes in wages and hours."

This table specifies in detail the industry, the particular locality, the date at which the change became effective, the exact class of labor represented, and the exact character of the change for different grades of labor in the particular industry and district. Different rates apply according to age, sex, term of employment, district, and branch of the trade. Not only is this true, but the principle whereby the rate changes up or down is apt to be different for each of the above classifications. * * * It should be noted that each monthly summary deals only with workers whose wages have altered during the month; nowhere is a complete conspectus of the whole wage situation throughout Great Britain available, because of the constantly changing status.

The report contains also a discussion of trade disputes in England, some consideration of wage rates, and figures as to wages in various occupations.

TREND OF EMPLOYMENT

Employment in Selected Manufacturing Industries in February, 1927

EMPLOYMENT in manufacturing industries increased 1.8 per cent in February as compared with January, and pay-roll totals increased 6.1 per cent. These increases more than overcame the moderately large decreases in both items which occurred in January, due to inventory taking and repairs, and also the small decrease in employment reported in December.

Employment in February, then, was at a higher level than at any time since November, 1926, and pay-roll totals were considerably higher than at any time since October, 1926. However, the upward trend has not yet reached the level of February, 1926, both employment and pay-roll totals being lower than they were a year ago, although in both cases the differences are considerably smaller than in January, 1927.

The Bureau of Labor Statistics' weighted index of employment for February, 1927, is 91.0 as compared with 89.4 for January, 1927, and 93.3 for February, 1926; the weighted index for pay-roll totals for February, 1927, is 96.4 as compared with 90.9 for January, 1927, and 97.9 for February, 1926.

The February, 1927, report is based on returns from 10,329 establishments in 54 of the leading manufacturing industries of the United States, having in February 3,009,982 employees whose combined earnings in one week were $81,067,480.

Comparison of Employment and Pay-roll Totals in January and February, 1927

REACTION from the seasonal January curtailment was shown in February by increases in employment in 39 of the 54 industries and increases in pay-roll totals in 45 industries, while the comparatively small decreases in the remaining industries were almost wholly seasonal.

The food group of industries fell off slightly both in employment and pay-roll totals and the lumber group reported a loss of 1 per cent in employment, but with these exceptions increases—substantial in most cases—appear in both items in every group. The tobacco group shows the greatest improvement in employment, 7.5 per cent, and the vehicle group the greatest increase in pay-roll totals, 20.7 per cent.

Marked improvement is shown in the 10 textile industries, notably in men's clothing, women's clothing, cotton goods, and dyeing and finishing. Iron and steel, foundry and machine-shop products, steam fittings, and stoves report greatly increased activities, as also

do pottery, glass, the tobacco industries, and especially carriages and wagons and automobiles, the last-named industry reporting a gain of 12.6 per cent in employment and a gain of nearly 50 per cent in pay-roll totals.

With one exception both employment and pay-roll totals attained greater proportions in February, as compared with January, in each of the nine geographic divisions, the exception being in employment in the small Mountain division. The most pronounced improvement appeared in the East North Central States, while the smallest gain in employment was reported by the Pacific States.

For convenient reference the latest figures available relating to all employees, excluding executives and officials, on Class I railroads, drawn from Interstate Commerce Commission reports, are given at the foot of Table 1 and Table 3.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK EACH IN JANUARY AND FEBRUARY, 1927

Industry	Establishments	Number on pay roll		Per cent of change	Amount of pay roll		Per cent of change
		January, 1927	February, 1927		January, 1927	February, 1927	
Food and kindred products	**1,478**	**209,746**	**208,381**	(1)	**$5,358,954**	**$5,310,277**	(1)
Slaughtering and meat packing	190	87,905	86,152	−2.0	2,265,131	2,167,672	−4.3
Confectionery	256	30,089	29,527	−1.9	563,463	558,506	−0.9
Ice cream	194	7,741	7,806	+0.8	254,551	254,310	−0.1
Flour	331	15,075	15,034	−0.3	392,800	390,985	−0.5
Baking	494	59,544	60,337	+1.3	1,602,636	1,644,650	+2.6
Sugar refining, cane	13	9,392	9,525	+1.4	280,373	294,154	+4.9
Textiles and their products	**1,857**	**600,223**	**608,748**	(1)	**11,768,274**	**12,318,225**	(1)
Cotton goods	490	236,221	239,474	+1.4	3,820,582	3,962,255	+3.7
Hosiery and knit goods	246	79,452	80,022	+0.7	1,464,321	1,540,547	+5.2
Silk goods	198	56,156	56,517	+0.6	1,154,450	1,241,593	+7.5
Woolen and worsted goods	194	65,585	65,781	+0.3	1,477,231	1,487,289	+0.7
Carpets and rugs	30	24,643	24,696	+0.2	659,828	679,001	+2.9
Dyeing and finishing textiles	89	30,348	30,713	+1.2	738,955	773,492	+4.7
Clothing, men's	280	59,240	61,343	+3.5	1,437,713	1,531,912	+6.6
Shirts and collars	82	19,542	19,719	+0.9	310,278	319,925	+3.1
Clothing, women's	175	17,637	18,660	+5.8	439,485	500,072	+13.8
Millinery and lace goods	73	11,398	11,823	+3.7	265,431	282,139	+6.3
Iron and steel and their products	**1,708**	**662,538**	**675,031**	(1)	**19,203,510**	**20,374,140**	(1)
Iron and steel	210	272,041	276,194	+1.5	8,062,258	8,566,928	+6.3
Cast-iron pipe	43	13,923	13,842	−0.6	311,716	330,811	+6.1
Structural ironwork	155	21,798	21,807	+ (2)	606,447	621,866	+2.5
Foundry and machine-shop products	970	238,355	244,018	+2.4	6,963,958	7,425,284	+6.6
Hardware	67	33,638	33,963	+1.0	847,954	878,251	+3.6
Machine tools	158	31,518	31,285	−0.7	963,634	958,521	−0.5
Steam fittings and steam and hot-water heating apparatus	114	38,032	39,759	+4.5	1,088,267	1,188,040	+9.2
Stoves	81	13,233	14,163	+7.0	359,276	404,439	+12.6
Lumber and its products	**1,658**	**291,661**	**290,054**	(1)	**4,257,447**	**4,377,406**	(1)
Lumber, sawmills	443	113,502	112,155	−1.2	2,184,923	2,233,423	+2.2
Lumber, millwork	243	29,485	29,030	−1.5	694,720	695,970	+0.2
Furniture	372	58,674	58,869	+0.3	1,377,804	1,448,013	+5.1
Leather and its products	**344**	**120,337**	**121,064**	(1)	**2,698,683**	**2,860,573**	(1)
Leather	130	27,222	27,714	+1.8	687,538	700,479	+1.9
Boots and shoes	214	93,115	93,350	+0.3	2,011,145	2,160,094	+7.4
Paper and printing	**890**	**167,256**	**167,475**	(1)	**5,409,350**	**5,440,371**	(1)
Paper and pulp	213	55,897	55,975	+0.1	1,481,577	1,512,206	+2.1
Paper boxes	177	18,787	18,429	−1.9	412,089	414,265	+0.5
Printing, book and job	288	43,238	43,430	+0.4	1,545,301	1,536,280	−0.6
Printing, newspapers	212	49,334	49,641	+0.6	1,970,383	1,977,620	+0.4

[1] The per cent of change has not been computed for the reason that the figures in the preceding columns are unweighted and refer only to the establishments reporting, for the weighted per cent of change, wherein proper allowance is made for the relative importance of the several industries, so that the figures may represent all establishments of the country in the industries here represented, see Table 2.

[2] Less than one-tenth of 1 per cent.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK EACH IN JANUARY AND FEBRUARY, 1927—Continued

Industry	Establishments	Number on pay roll		Per cent of change	Amount of pay roll		Per cent of change
		January, 1927	February, 1927		January, 1927	February, 1927	
Chemicals and allied products	**290**	**92,619**	**93,711**	(1)	**$2,666,423**	**$2,788,825**	(1)
Chemicals	119	30,936	30,987	+0.2	830,613	845,303	+1.8
Fertilizers	110	8,369	9,126	+9.0	163,809	175,380	+7.1
Petroleum refining	61	53,314	53,598	+0.5	1,672,001	1,768,142	+5.8
Stone, clay, and glass products	**691**	**103,301**	**104,850**	(1)	**2,617,483**	**2,777,146**	(1)
Cement	98	24,151	23,607	−2.3	661,108	670,514	+1.4
Brick, tile, and terra cotta	418	29,951	29,327	−2.1	739,170	765,395	+3.5
Pottery	56	12,696	13,357	+5.2	305,437	359,969	+17.9
Glass	119	36,503	38,559	+5.6	911,768	981,268	+7.6
Metal products, other than iron and steel	**217**	**51,345**	**51,551**	(1)	**1,352,355**	**1,416,342**	(1)
Stamped and enameled ware	67	18,381	18,917	+2.9	430,766	485,598	+12.7
Brass, bronze, and copper products	150	32,964	32,634	−1.0	921,589	930,744	+1.0
Tobacco products	**190**	**40,495**	**43,522**	(1)	**704,059**	**730,681**	(1)
Chewing and smoking tobacco and snuff	31	8,686	9,313	+7.2	143,018	146,639	+2.5
Cigars and cigarettes	159	31,809	34,209	+7.5	561,041	584,042	+4.1
Vehicles for land transportation	**1,119**	**444,615**	**479,704**	(1)	**11,584,629**	**15,183,096**	(1)
Automobiles	203	281,283	316,719	+12.6	6,851,929	10,221,160	+49.2
Carriages and wagons	67	1,483	1,739	+17.3	33,861	39,272	+16.0
Car building and repairing, electric-railroad	374	25,332	25,623	+1.1	772,394	780,808	+1.1
Car building and repairing, steam-railroad	475	136,517	135,623	−0.7	3,926,445	4,141,856	+5.5
Miscellaneous industries	**397**	**254,752**	**255,891**	(1)	**7,353,862**	**7,490,398**	(1)
Agricultural implements	92	26,103	26,885	+3.0	727,382	784,052	+7.8
Electrical machinery, apparatus, and supplies	156	117,801	116,214	−1.3	3,420,407	3,385,282	−1.0
Pianos and organs	39	7,916	7,651	−3.3	225,992	216,193	−4.3
Rubber boots and shoes	10	18,177	18,151	−0.1	462,368	448,863	−2.9
Automobile tires	60	52,443	53,404	+1.8	1,574,983	1,703,207	+8.1
Shipbuilding, steel	40	32,312	33,586	+3.9	942,730	952,801	+1.1
All industries	**10,329**	**2,948,887**	**3,009,982**	(1)	**74,975,029**	**81,067,480**	(1)

Recapitulation by Geographic Divisions

GEOGRAPHIC DIVISION							
New England	1,355	423,194	428,158	+1.2	$10,256,901	$10,555,853	+2.9
Middle Atlantic	2,459	837,859	846,839	+1.1	23,450,176	24,305,963	+3.6
East North Central	2,671	927,084	968,617	+4.5	24,944,834	29,202,013	+17.1
West North Central	1,018	154,496	155,235	+0.5	3,730,501	3,906,902	+4.7
South Atlantic	1,111	282,552	286,435	+1.4	5,205,166	5,453,025	+4.8
East South Central	473	106,640	107,732	+1.0	2,031,750	2,127,736	+4.7
West South Central	451	85,705	86,341	+0.7	1,815,640	1,870,599	+3.0
Mountain	172	26,102	25,177	−3.5	707,947	710,478	+0.4
Pacific	618	105,219	105,448	+0.2	2,832,114	2,934,911	+3.6
All divisions	**10,329**	**2,948,887**	**3,009,982**	(1)	**74,975,029**	**81,067,480**	(1)

Employment on Class I Railroads

December 15, 1926	1,756,933		[2] $245,350,107	
January 15, 1927	1,707,272	−2.8	[2] 236,942,002	−3.4

[1] The per cent of change has not been computed for the reason that the figures in the preceding columns are unweighted and refer only to the establishments reporting; for the weighted per cent of change, wherein proper allowance is made for the relative importance of the several industries, so that the figures may represent all establishments of the country in the industries here represented, see Table 2.

[2] Amount of pay roll for 1 month.

TABLE 2.—PER CENT OF CHANGE, JANUARY TO FEBRUARY, 1927—12 GROUPS OF INDUSTRIES AND TOTAL OF ALL INDUSTRIES

[Computed from the index numbers of each group, which are obtained by weighting the index numbers of the several industries of the group, by the number of employees, or wages paid, in the industries]

Group	Per cent of change, January to February, 1927		Group	Per cent of change, January to February, 1927	
	Number on pay roll	Amount of pay roll		Number on pay roll	Amount of pay roll
Food and kindred products	−0.5	−0.6	Metal products, other than iron and steel	+0.1	+3.6
Textiles and their products	+1.8	+5.9	Tobacco products	+7.5	+3.9
Iron and steel and their products	+1.9	+6.1	Vehicles for land transportation	+5.0	+20.7
Lumber and its products	−1.0	+2.5	Miscellaneous industries	+1.8	+1.9
Leather and its products	+0.5	+5.7			
Paper and printing	+0.1	+0.5	All industries	+1.8	+6.1
Chemicals and allied products	+1.7	+4.0			
Stone, clay, and glass products	+1.9	+7.0			

Comparison of Employment and Pay-Roll Totals in February, 1927, and February, 1926

THE volume of employment in manufacturing establishments was 2½ per cent smaller in February, 1927, than in February, 1926, and employees' earnings in one week were 1½ per cent less.

Steel shipbuilding showed a phenomenal increase over this 12 months' interval and other large gains were shown in woolen and worsted goods and women's clothing—both having recovered from labor difficulties—also in the printing industries and petroleum refining.

The outstanding decreases in this comparison appeared in lumber (millwork), stamped and enameled ware, automobiles, carriages and wagons, cane sugar refining, agricultural implements, and fertilizers.

The groups of miscellaneous industries and paper and printing industries both had more employees and larger pay-roll totals in February, 1927, than in February, 1926, while the textile, leather, and chemical groups reported decidedly augmented pay-roll totals, but slightly smaller numbers of employees. The remaining 7 groups of industries each reported a condition less satisfactory than in February, 1926, the decreases in three groups—vehicles, metal products other than iron and steel, and lumber—ranging between 6.7 per cent and 9.5 per cent in the two items.

The South Atlantic geographic division alone had more employees in February, 1927, than in February, 1926, the increase being 1.3 per cent. The decreases in employment were notable in the three largest divisions—New England, Middle Atlantic, and East North Central—ranging from 3.8 per cent to 5.2 per cent, although the largest decrease, 7.3 per cent, was in the smaller East South Central division.

Pay-roll totals were larger in February, 1927, than in the same month of 1926, not only in the South Atlantic division but in the Pacific, Mountain, and West South Central divisions as well.

TABLE 3.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS—FEBRUARY, 1927, WITH FEBRUARY, 1926

[The per cents of change for each of the 12 groups of industries, and for the total of all industries, are weighted, in the same manner as are the per cents of change in Table 2]

Industry	Per cent of change, February, 1927, compared with February, 1926	
	Number on pay roll	Amount of pay roll
Food and kindred products	−1.5	−0.9
Slaughtering and meat packing	−0.7	−1.2
Confectionery	−6.5	−3.2
Ice cream	−4.9	−6.4
Flour	−0.7	−1.0
Baking	+2.7	+3.2
Sugar refining, cane	−17.3	−16.2
Textiles and their products	−0.4	+1.1
Cotton goods	+1.6	+3.0
Hosiery and knit goods	−3.2	+0.6
Silk goods	−7.3	−5.6
Woolen and worsted goods	+6.4	+9.9
Carpet and rugs	−4.5	+1.9
Dyeing and finishing textiles	−2.0	−0.2
Clothing, men's	−2.3	−2.0
Shirts and collars	−9.1	−10.7
Clothing, women's	+5.7	+3.4
Millinery and lace goods	−8.7	−7.9
Iron and steel and their products	−3.0	−2.4
Iron and steel	−5.5	−4.5
Cast-iron pipe	−7.0	−10.6
Structural ironwork	+0.7	−1.5
Foundry and machine-shop products	−0.2	+0.5
Hardware	−9.4	−6.6
Machine tools	−0.5	−1.3
Steam fittings and steam and hot-water heating apparatus	−9.5	−7.2
Stoves	−6.2	−4.8
Lumber and its products	−7.0	−6.7
Lumber, sawmills	−6.7	−6.9
Lumber, millwork	−12.3	−13.9
Furniture	−4.8	−1.4
Leather and its products	−0.5	+1.3
Leather	+1.5	+0.9
Boots and shoes	−1.2	+1.6
Paper and printing	+2.0	+3.3
Paper and pulp	−0.8	−1.2
Paper boxes	−3.0	−1.3
Printing, book and job	+3.0	+6.4
Printing, newspapers	+5.3	+5.3
Chemicals and allied products	−0.5	+5.2
Chemicals	+1.0	+6.0
Fertilizers	−13.5	−8.6
Petroleum refining	+4.5	+9.0
Stone, clay, and glass products	−3.4	−2.6
Cement	−6.0	−4.0
Brick, tile, and terra cotta	−5.9	−3.0
Pottery	+2.0	+3.4
Glass	−2.6	−4.0
Metal products, other than iron and steel	−0.1	−3.5
Stamped and enameled ware	−15.2	−16.0
Brass, bronze, and copper products	−6.5	−5.7
Tobacco products	−6.1	−6.2
Chewing and smoking tobacco and snuff	+1.0	−4.3
Cigars and cigarettes	−7.2	−6.5
Vehicles for land transportation	−9.5	−9.0
Automobiles	−11.8	−15.7
Carriages and wagon	−24.7	−19.9
Car building and repairing, electric-railroad	+0.1	−2.1
Car building and repairing, steam-railroad	−7.6	−2.8
Miscellaneous industries	+4.2	+7.1
Agricultural implements	−10.2	−9.1
Electrical machinery, apparatus, and supplies	−4.1	−4.2
Pianos and organs	−6.6	−10.5
Rubber boots and shoes	−1.1	+3.8
Automobile tires	−8.3	−6.8
Shipbuilding, steel	+19.0	+21.6
All industries	−2.5	−1.5

Recapitulation by Geographic Divisions

GEOGRAPHIC DIVISION		
New England	−3.8	−3.1
Middle Atlantic	−4.4	−2.1
East North Central	−5.2	−5.9
West North Central	−2.9	−3.7
South Atlantic	+1.3	+1.4
East South Central	−7.3	−6.7
West South Central	−0.6	+1.6
Mountain	−3.1	+0.3
Pacific	−1.9	+0.7
All divisions	−2.5	−1.5

TABLE 3.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS—FEBRUARY, 1927, WITH FEBRUARY, 1926—Continued

Employment on Class I Railroads

Month and year	Number on pay roll	Per cent of change	Amount of pay roll	Per cent of change
January 15, 1926	1,713,332		[1] $232,367,744	
January 15, 1927	1,707,272	−0.4	[1] 236,942,092	+2.0

[1] Amount of pay roll for one month.

Per Capita Earnings

PER CAPITA earnings in the 54 industries combined were 4.1 per cent higher in February, 1927, than in January, 1927, and 1 per cent higher than in February, 1926.

The increases in February, 1927, as compared with January, 1927, in 41 separate industries were led by automobiles, with a gain of nearly one-third, and pottery, with a gain of 12 per cent; the decreases in 13 industries were led by the two tobacco industries, with losses of 4.4 per cent and 3.2 per cent.

Per capita earnings increased in 35 industries in February, 1927, as compared with the same month of 1926, and decreased in the remaining 19.

TABLE 4.—COMPARISON OF PER CAPITA EARNINGS, FEBRUARY, 1927, WITH JANUARY, 1927, AND FEBRUARY, 1926

Industry	Per cent of change February, 1927, compared with—		Industry	Per cent of change February, 1927, compared with—	
	January, 1927	February, 1926		January, 1927	February, 1926
Automobiles	+32.5	−4.9	Millinery and lace goods	+2.4	+0.9
Pottery	+12.0	+1.3	Shirts and collars	+2.1	−2.3
Stamped and enameled ware	+9.5	−0.9	Brass, bronze, and copper products	+2.0	+0.8
Clothing, women's	+7.5	−2.2	Glass	+1.9	−1.7
Boots and shoes	+7.1	+2.4	Paper and pulp	+1.9	−0.4
Silk goods	+6.9	+2.0	Lumber, millwork	+1.7	−1.9
Cast-iron pipe	+6.7	−3.8	Chemicals	+1.6	+4.9
Automobile tires	+6.2	+1.6	Baking	+1.3	+0.5
Car building and repairing, steam-railroad	+6.2	+5.1	Confectionery	+1.0	+3.6
Brick, tile, and terra cotta	+5.8	+3.3	Woolen and worsted goods	+0.4	+3.3
Petroleum refining	+5.2	−4.3	Electrical machinery, apparatus, and supplies	+0.3	+0.1
Stoves	+5.2	+1.7	Machine tools	+0.2	−0.8
Furniture	+4.8	+1.5	Leather	+0.1	−0.7
Iron and steel	+4.7	+0.9	Car building and repairing, electric-railroad	−0.1	−2.1
Agricultural implements	+4.6	+1.1	Flour	−0.2	−0.1
Hosiery and knit goods	+4.4	+4.0	Printing, newspapers	−0.3	+0.2
Steam fittings and steam and hot-water heating apparatus	+4.4	+2.5	Ice cream	−0.9	−1.8
Foundry and machine-shop products	+4.1	+0.8	Pianos and organs	−1.0	−4.1
Cement	+3.8	+2.0	Printing, book and job	−1.0	+3.5
Sugar refining, cane	+3.5	+1.5	Carriages and wagons	−1.1	+6.6
Dyeing and finishing textiles	+3.4	+1.6	Fertilizers	−1.8	+5.4
Lumber, sawmills	+3.4	−0.4	Slaughtering and meat packing	−2.4	−0.3
Clothing, men's	+2.9	+0.5	Rubber boots and shoes	−2.8	+5.0
Carpets and rugs	+2.7	+5.5	Shipbuilding, steel	−2.8	+2.1
Hardware	+2.6	+2.8	Cigars and cigarettes	−3.2	+0.7
Paper boxes	+2.5	+1.8	Chewing and smoking tobacco and snuff	−4.4	−5.2
Structural ironwork	+2.5	−2.1			
Cotton goods	+2.4	+1.5			

Wage Changes

WAGE-RATE increases were reported for the month ending February 15, 1927, by 43 establishments in 17 industries. These increases averaged 4.8 per cent and affected 2,540 employees.

Wage-rate decreases were reported by 35 establishments in 15 industries. These decreases averaged 8.6 per cent and affected 7,485 employees. No especial significance can be attached to the decreases in any one industry, although the total number of employees affected by them is greater than in any recent month.

TABLE 5.—WAGE ADJUSTMENT OCCURRING BETWEEN JANUARY 15 AND FEBRUARY 15, 1927

Industry	Establishments		Per cent of increase or decrease in wage rates		Employees affected		
	Total number reporting	Number reporting increase or decrease in wage rates	Range	Average	Total number	Per cent of employees	
						In establishments reporting increase or decrease in wage rates	In all establishments reporting
			Increases				
Slaughtering and meat packing	190	2	6	6.0	139	6	(1)
Flour	331	1	10	10.0	4	25	(1)
Baking	494	1	2	2.0	75	40	(1)
Silk goods	198	2	4- 8	6.2	61	8	(1)
Clothing, men's	280	1	12	12.0	22	8	(1)
Shirts and collars	82	4	5	5.0	29	12	(1)
Millinery and lace goods	73	1	1	1.0	6	15	(1)
Foundry and machine-shop products	970	11	2-10	5.8	178	16	(1)
Lumber, sawmills	443	1	6.6	6.6	80	20	(1)
Furniture	372	4	5- 9	6.1	70	12	(1)
Paper boxes	177	1	5	5.0	15	14	(1)
Printing, book and job	288	3	5.5-12.1	7.8	64	12	(1)
Printing, newspapers	212	5	3- 4	3.4	224	26	(1)
Chemicals	119	2	5-10	9.3	126	6	(1)
Car building and repairing, steam-railroad	475	2	5.1- 7.5	5.2	724	48	(1)
Agricultural implements	92	1	7	7.0	8	10	(1)
Shipbuilding, steel	40	1	2.5- 3.5	3.0	715	100	2
			Decreases				
Slaughtering and meat packing	190	2	5- 6	5.2	162	21	(1)
Confectionery	256	1	25	25.0	20	42	(1)
Cotton goods	490	1	10	10.0	340	100	(1)
Woolen and worsted goods	194	2	5-11	6.9	889	99	
Clothing, men's	280	2	3- 8	3.1	1,234	89	2
Cast-iron pipe	43	2	10	10.0	250	43	2
Foundry and machine-shop products	970	4	5-10	9.4	386	33	(1)
Steam fittings and steam and hot-water heating apparatus	114	1	10	10.0	210	88	1
Lumber, sawmills	443	8	5-15	9.7	1,620	78	1
Lumber, millwork	243	3	8-20	17.5	298	70	1
Brick, tile, and terra cotta	418	1	8	8.0	56	97	(1)
Glass	119	4	10	10.0	1,254	99	3
Cigars and cigarettes	159	2	10	10.0	509	70	1
Automobiles	203	1	5	5.0	26	10	(1)
Automobile tires	60	1	10	10.0	231	100	(1)

[1] Less than one-half of 1 per cent.

Indexes of Employment and Pay-Roll Totals in Manufacturing Industries

INDEX numbers for February, 1927, and for January, 1927, and February, 1926, showing relatively the variation in number of persons employed and in pay-roll totals in each of the 54 industries surveyed by the Bureau of Labor Statistics, together with general indexes for the combined 12 groups of industries, appear in Table 6.

The general index of employment for February, 1927, is 91.0, this number being 1.8 per cent higher than the index for January, 1927, and 2½ per cent lower than the index for February, 1926. The general index of pay-roll totals for February, 1927, is 96.4, this number being 6.1 per cent higher than the index for January, 1927, and 1½ per cent lower than the index for February, 1926.

TABLE 6.—INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES, FEBRUARY, 1926, AND JANUARY AND FEBRUARY, 1927

[Monthly average, 1923=100]

Industry	Employment			Pay-roll totals		
	February, 1926	January, 1927	February, 1927	February, 1926	January, 1927	February, 1927
General index	**93.3**	**89.4**	**91.0**	**97.9**	**90.9**	**96.4**
Food and kindred products	**89.4**	**88.5**	**88.1**	**92.9**	**92.7**	**92.1**
Slaughtering and meat packing	83.3	84.4	82.7	85.0	87.7	84.0
Confectionery	87.1	83.0	81.4	93.6	91.5	90.6
Ice cream	85.1	80.3	80.9	91.9	86.1	86.0
Flour	86.4	86.1	85.8	88.3	87.9	87.4
Baking	97.4	98.7	100.0	102.9	103.5	106.2
Sugar refining, cane	101.9	83.1	84.3	104.7	83.6	87.7
Textiles and their products	**90.1**	**88.1**	**89.7**	**93.0**	**88.8**	**94.0**
Cotton goods	86.0	86.2	87.4	86.4	85.9	89.0
Hosiery and knit goods	101.6	97.7	98.3	114.4	109.4	115.1
Silk goods	107.2	98.9	99.4	116.0	101.9	109.5
Woolen and worsted goods	80.1	85.0	85.2	77.9	85.0	85.6
Carpets and rugs	95.6	91.1	91.3	91.6	90.7	93.3
Dyeing and finishing textiles	101.4	98.2	99.4	106.6	101.6	106.4
Clothing, men's	88.7	83.8	86.7	85.8	78.9	84.1
Shirts and collars	90.4	81.4	82.2	93.4	80.9	83.4
Clothing, women's	85.3	85.3	90.2	96.6	87.8	99.9
Millinery and lace goods	81.8	72.0	74.7	87.1	75.5	80.2
Iron and steel and their products	**92.6**	**88.1**	**89.8**	**98.8**	**90.9**	**96.4**
Iron and steel	99.9	93.0	94.4	105.6	94.9	100.9
Cast-iron pipe	103.9	97.2	96.6	108.1	91.0	96.6
Structural ironwork	93.4	94.1	94.1	102.0	98.1	100.5
Foundry and machine-shop products	86.4	84.2	86.2	91.1	86.0	91.6
Hardware	93.5	83.9	84.7	102.8	92.7	96.0
Machine tools	102.5	102.8	102.0	114.2	113.2	112.7
Steam fittings and steam and hot-water heating apparatus	101.6	87.9	91.9	107.0	90.9	99.3
Stoves	85.3	74.8	80.0	87.3	73.8	83.1
Lumber and its products	**89.5**	**84.0**	**83.2**	**95.7**	**87.1**	**89.3**
Lumber, sawmills	83.7	79.1	78.1	89.9	81.9	83.7
Lumber, millwork	101.2	90.1	88.8	106.5	91.5	91.7
Furniture	102.2	97.0	97.3	108.8	102.1	107.3
Leather and its products	**92.6**	**91.6**	**92.1**	**91.1**	**87.3**	**92.3**
Leather	93.3	93.0	94.7	96.3	95.4	97.2
Boots and shoes	92.4	91.1	91.3	89.0	84.1	90.4
Paper and printing	**102.4**	**104.3**	**104.4**	**109.7**	**112.7**	**113.3**
Paper and pulp	95.3	94.4	94.5	103.3	100.0	102.1
Paper boxes	100.0	98.9	97.0	107.7	105.8	106.3
Printing, book and job	102.8	105.5	105.9	110.7	118.5	117.8
Printing, newspapers	110.0	115.1	115.8	115.4	121.0	121.5
Chemicals and allied products	**100.5**	**98.3**	**100.0**	**100.8**	**101.9**	**106.0**
Chemicals	95.3	96.1	96.3	101.8	106.0	107.9
Fertilizers	122.2	97.0	105.7	121.0	103.3	110.6
Petroleum	98.0	101.9	102.4	94.1	97.0	102.6

TABLE 6.—INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES, FEBRUARY, 1926, AND JANUARY AND FEBRUARY, 1927—Continued

Industry	Employment			Pay-roll totals		
	February, 1926	January, 1927	February, 1927	February, 1926	January, 1927	February, 1927
Stone, clay, and glass products	**94.3**	**89.4**	**91.1**	**100.8**	**91.8**	**98.2**
Cement	85.2	82.0	80.1	84.9	80.4	81.5
Brick, tile, and terra cotta	89.8	86.4	84.5	92.5	86.7	89.7
Pottery	107.1	103.8	109.2	118.9	104.3	122.9
Glass	97.2	89.7	94.7	108.0	96.4	103.7
Metal products, other than iron and steel	**101.8**	**92.4**	**92.5**	**104.0**	**91.9**	**95.2**
Stamped and enameled ware	101.5	83.7	86.1	102.8	76.6	86.4
Brass, bronze, and copper products	102.0	96.4	95.4	104.4	97.5	98.5
Tobacco products	**89.0**	**77.8**	**83.6**	**85.9**	**77.6**	**80.6**
Chewing and smoking tobacco and snuff	97.9	92.3	98.9	109.8	102.5	105.1
Cigars and cigarettes	87.9	75.9	81.6	83.1	74.7	77.7
Vehicles for land transportation	**94.3**	**81.2**	**85.3**	**97.6**	**73.6**	**88.8**
Automobiles	115.3	90.3	101.7	122.1	99.0	102.9
Carriages and wagons	97.5	62.6	73.4	96.1	66.4	77.0
Car building and repairing, electric-railroad	89.0	88.1	89.1	92.5	89.6	90.6
Car building and repairing, steam-railroad	81.2	75.5	75.0	82.3	75.8	80.0
Miscellaneous industries	**98.4**	**100.7**	**102.5**	**102.0**	**107.3**	**109.2**
Agricultural implements	107.6	93.8	96.6	123.5	104.1	112.2
Electrical machinery, apparatus, and supplies	99.2	96.3	95.1	104.5	101.1	100.1
Pianos and organs	96.6	93.3	90.2	104.7	98.0	93.7
Rubber boots and shoes	90.4	89.5	89.4	96.3	102.9	103.0
Automobile tires	113.7	102.4	104.3	120.4	103.8	112.2
Shipbuilding, steel	92.1	105.5	109.6	93.1	112.0	113.2

The following table shows the general index of employment in manufacturing industries and the general index of pay-roll totals from January, 1923, to February, 1927.

TABLE 7.—GENERAL INDEX OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES, JANUARY, 1923, TO FEBRUARY, 1927

[Monthly average, 1923=100]

Month	Employment					Pay-roll totals				
	1923	1924	1925	1926	1927	1923	1924	1925	1926	1927
January	98.0	95.4	90.0	92.3	89.4	91.8	94.5	90.0	93.9	90.9
February	99.6	96.6	91.6	93.3	91.0	95.2	99.4	95.1	97.9	96.4
March	101.8	96.4	92.3	93.7		100.3	99.0	96.6	99.1	
April	101.8	94.5	92.1	92.8		101.3	96.9	94.2	97.2	
May	101.8	90.8	90.9	91.7		104.8	92.4	94.4	95.6	
June	101.9	87.9	90.1	91.3		104.7	87.0	91.7	95.5	
July	100.4	84.8	89.3	89.8		99.9	80.8	89.6	91.2	
August	99.7	85.0	89.9	90.7		99.3	83.5	91.4	94.6	
September	99.8	86.7	90.9	92.2		100.0	86.0	90.4	96.1	
October	99.3	87.9	92.3	92.5		102.3	88.5	96.2	98.6	
November	98.7	87.8	92.5	91.4		101.0	87.6	96.2	95.4	
December	96.9	89.4	92.6	90.9		98.9	91.7	97.3	95.6	
Average	**100.0**	**90.3**	**91.2**	**91.9**	[1] **90.2**	**100.0**	**90.6**	**93.6**	**95.8**	[1] **93.7**

[1] Average for 2 months.

Proportion of Time Worked and Force Employed in Manufacturing Industries in February, 1927

REPORTS from 8,029 establishments in February, 1927, show that 1 per cent were idle, 81 per cent were operating on a full-time schedule, and 18 per cent were operating on a part-time schedule; 38 per cent had a full normal force of employees and 61 per cent were operating with a reduced force. The establishments in operation were employing an average of 87 per cent of a full normal force of employees who were working an average of 97 per cent of full time. These averages are each 1 per cent higher than were reported in January, 1927.

An average of approximately full-time operation was reported by establishments in 18 separate industries in February, 1927, 9 of these industries showing an average of 100 per cent or over and 9 others an average of 99 per cent. A considerable amount of overtime work was indicated in February, either by lengthening of the one shift worked per day or through the addition of a night shift in establishments which normally have operated only one shift per day. While the addition of a night shift may mean a double force it does not from necessity, as frequently only a part of the equipment is used in turning out the product desired beyond that produced by the day force.

TABLE 8.—ESTABLISHMENTS WORKING FULL AND PART TIME AND EMPLOYING FULL AND PART WORKING FORCE IN FEBRUARY, 1927

Industry	Establishments reporting		Per cent of establishments operating—		Average per cent of full time operated by establishments operating	Per cent of establishments operating with—		Average per cent of normal full force employed by establishments operating
	Total number	Per cent idle	Full time	Part time		Full normal force	Part normal force	
Food and kindred products	**1,198**	**1**	**79**	**20**	**96**	**36**	**64**	**85**
Slaughtering and meat packing	152	1	72	27	97	37	63	91
Confectionary	204	------	64	36	93	9	91	70
Ice cream	145	1	92	7	98	3	97	62
Flour	269	1	67	31	91	55	44	92
Baking	420	------	92	8	99	46	54	94
Sugar refining, cane	8	------	100	------	100	------	100	86
Textiles and their products	**1,321**	**1**	**86**	**13**	**99**	**49**	**50**	**91**
Cotton goods	420	(1)	94	6	99	64	35	94
Hosiery and knit goods	162	1	78	21	96	38	60	88
Silk goods	155	1	90	8	102	48	51	96
Woolen and worsted goods	163	1	72	28	98	34	65	88
Carpets and rugs	19	------	89	11	97	47	53	91
Dyeing and finishing textiles	79	------	75	25	95	38	62	88
Clothing, men's	151	------	86	14	98	45	55	87
Shirts and collars	37	------	95	5	99	43	57	91
Clothing, women's	98	------	94	6	100	56	44	94
Millinery and lace goods	37	------	78	22	97	35	65	82
Iron and steel and their products	**1,499**	**(1)**	**75**	**25**	**96**	**31**	**68**	**86**
Iron and steel	170	1	78	21	95	24	75	86
Cast-iron pipe	42	2	50	48	85	24	74	85
Structural ironwork	125	------	76	24	96	31	69	83
Foundry and machine-shop products	816	(1)	73	27	96	31	68	85
Hardware	58	------	76	24	97	24	76	87
Machine tools	135	------	90	10	99	34	66	87
Steam fittings and steam and hot-water heating apparatus	87	------	80	20	96	39	61	93
Stoves	66	2	59	39	89	44	55	87

[1] Less than one-half of 1 per cent.

TABLE 8.—ESTABLISHMENTS WORKING FULL AND PART TIME AND EMPLOYING FULL AND PART WORKING FORCE IN FEBRUARY, 1927—Continued

Industry	Establishments reporting		Per cent of establishments operating—		Average per cent of full time operated by establishments operating	Per cent of establishments operating with—		Average per cent of normal full force employed by establishments operating
	Total number	Per cent idle	Full time	Part time		Full normal force	Part normal force	
Lumber and its products	**870**	**2**	**78**	**20**	**97**	**32**	**67**	**84**
Lumber, sawmills	390	3	84	13	99	30	67	81
Lumber, millwork	182	1	64	35	94	19	80	80
Furniture	298	------	80	20	97	42	58	91
Leather and its products	**255**	(1)	**87**	**12**	**97**	**36**	**64**	**89**
Leather	96	------	98	2	99	45	55	89
Boots and shoes	159	1	81	18	96	30	69	89
Paper and printing	**582**	(1)	**90**	**10**	**99**	**52**	**47**	**94**
Paper and pulp	125	1	84	15	97	50	50	95
Paper boxes	122	------	81	19	98	23	77	88
Printing, book and job	202	------	91	9	100	41	59	94
Printing, newspapers	133	------	100	------	100	100	--------	100
Chemicals and allied products	**243**	(1)	**82**	**17**	**97**	**55**	**45**	**89**
Chemicals	93	------	97	3	100	97	3	91
Fertilizers	103	1	61	38	94	11	88	65
Petroleum refining	47	------	100	------	100	68	32	94
Stone, clay, and glass products	**542**	**6**	**79**	**14**	**96**	**21**	**73**	**79**
Cement	79	------	91	9	97	19	81	79
Brick, tile, and terra cotta	321	9	73	18	95	16	76	73
Pottery	48	4	77	19	96	35	60	96
Glass	94	4	82	4	99	34	62	89
Metal products, other than iron and steel	**173**	------	**85**	**15**	**98**	**28**	**72**	**84**
Stamped and enameled ware	47	------	89	11	99	19	81	86
Brass, bronze, and copper products	126	------	83	17	98	31	69	84
Tobacco products	**107**	**2**	**47**	**51**	**93**	**30**	**68**	**87**
Chewing and smoking tobacco and snuff	23	------	74	26	99	43	57	95
Cigars and cigarettes	84	2	39	58	91	26	71	85
Vehicles for land transportation	**938**	(1)	**84**	**15**	**98**	**49**	**50**	**88**
Automobiles	147	------	61	39	95	26	74	74
Carriages and wagons	55	2	78	20	96	25	73	76
Car building and repairing, electric-railroad	322	------	97	3	100	58	42	96
Car building and repairing, steam-railroad	414	(1)	84	16	97	54	45	87
Miscellaneous industries	**301**	(1)	**77**	**23**	**96**	**29**	**71**	**86**
Agricultural implements	78	------	67	33	95	21	79	81
Electrical machinery, apparatus, and supplies	109	------	86	14	98	37	63	88
Pianos and organs	24	------	75	25	93	42	58	90
Rubber boots and shoes	9	------	67	33	97	44	56	94
Automobile tires	51	2	63	35	92	10	88	76
Shipbuilding, steel	30	------	100	------	104	37	63	101
Total	**8,029**	**1**	**81**	**18**	**97**	**38**	**61**	**87**

[1] Less than one-half of 1 per cent.

Employment and Pay-Roll Totals on Class I Railroads, January and December, 1926, and January, 1927

THE following tables show the number of employees on the 15th of the month and the total monthly earnings in various occupations among railroad employees in January and December, 1926, and in January, 1927.

The figures are for Class I roads—that is, all roads having operating revenues of $1,000,000 a year and over.

EMPLOYMENT AND EARNINGS OF RAILROAD EMPLOYEES—JANUARY AND DECEMBER, 1926, AND JANUARY, 1927

[From monthly reports of Interstate Commerce Commission. As data for only the more important occupations are shown separately, the group totals are not the sum of the items under the respective groups; the grand totals will be found on pp. 116 and 118]

Occupation	Number of employees at middle of month			Total earnings		
	January, 1926	December, 1926	January, 1927	January, 1926	December, 1926	January, 1927
Professional, clerical, and general	**282, 001**	**286, 120**	**283, 344**	**$38, 338, 162**	**$39, 768, 868**	**$39, 055, 230**
Clerks	166, 030	167, 711	165, 421	21, 352, 503	22, 100, 032	21, 523, 476
Stenographers and typists	25, 151	25, 533	25, 497	3, 063, 960	3, 184, 572	3, 147, 162
Maintenance of way and structures	**347, 362**	**377, 689**	**351, 591**	**31, 732, 599**	**35, 631, 397**	**33, 199, 584**
Laborers, extra gang and work train	43, 723	54, 611	46, 464	3, 089, 039	4, 025, 073	3, 393, 083
Laborers, track and roadway section	176, 157	188, 295	176, 376	12, 459, 204	14, 010, 784	12, 896, 077
Maintenance of equipment and stores	**526, 639**	**516, 850**	**509, 664**	**67, 418, 930**	**68, 802, 306**	**68, 043, 506**
Carmen	115, 052	111, 430	108, 756	16, 326, 743	16, 752, 916	16, 320, 993
Machinists	61, 482	60, 742	60, 255	9, 603, 106	9, 840, 376	9, 841, 972
Skilled trades helpers	115, 493	114, 664	112, 400	12, 521, 583	13, 012, 435	12, 829, 071
Laborers (shops, engine houses, power plants and stores)	44, 391	43, 594	43, 555	4, 244, 669	4, 233, 086	4, 240, 771
Common laborers (shops, engine houses, power plants, and stores)	60, 973	59, 712	59, 413	4, 873, 686	4, 880, 441	4, 836, 072
Transportation, other than train, engine, and yard	**204, 172**	**209, 641**	**203, 952**	**24, 877, 292**	**26, 038, 149**	**25, 060, 017**
Station agents	30, 817	30, 587	30, 557	4, 739, 707	4, 837, 392	4, 743, 074
Telegraphers, telephoners, and towermen	25, 729	25, 514	25, 479	3, 916, 826	3, 945, 152	3, 923, 962
Truckers (stations, warehouses, and platforms)	37, 138	39, 745	35, 802	3, 350, 297	3, 656, 013	3, 204, 940
Crossing and bridge flagmen and gatemen	22, 317	22, 016	22, 023	1, 675, 380	1, 678, 199	1, 681, 483
Transportation (yardmasters, switch tenders, and hostlers)	**24, 209**	**24, 393**	**24, 279**	**4, 530, 794**	**4, 637, 598**	**4, 588, 563**
Transportation, train and engine	**328, 949**	**342, 240**	**334, 442**	**65, 469, 967**	**70, 471, 789**	**66, 995, 302**
Road conductors	36, 881	38, 066	37, 243	8, 699, 248	9, 395, 519	8, 975, 822
Road brakemen and flagmen	74, 316	77, 607	75, 862	12, 813, 862	13, 919, 652	13, 187, 721
Yard brakemen and yard helpers	55, 312	57, 852	56, 173	9, 442, 427	10, 458, 639	9, 898, 638
Road engineers and motormen	43, 866	45, 790	44, 953	11, 837, 072	12, 548, 555	11, 927, 062
Road firemen and helpers	45, 473	47, 341	46, 086	8, 816, 502	9, 342, 635	8, 868, 894

State Reports on Employment

California

THE following data, taken from the February, 1927, Labor Market Bulletin, issued by the Bureau of Labor Statistics of California, show changes in volume of employment and pay roll from January, 1926, to January, 1927, in 794 establishments in that State.

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES AND IN TOTAL AMOUNT OF WEEKLY PAY ROLL IN 794 CALIFORNIA ESTABLISHMENTS BETWEEN JANUARY, 1926, AND JANUARY, 1927

Industry	Number of establishments reporting	Employees		Weekly pay roll	
		Number in January, 1927	Per cent of change as compared with January, 1926	Amount in January, 1927	Per cent of change as compared with January, 1926
Stone, clay, and glass products:					
Miscellaneous stone and mineral products	12	1,215	+5.6	$39,969	+20.9
Lime, cement, plaster	8	1,950	−10.1	55,794	−10.4
Brick, tile, pottery	24	3,474	+2.1	79,594	0
Glass	8	744	+10.7	25,999	+13.9
Total	52	7,383	−.2	201,356	+1.8
Metals, machinery, and conveyances:					
Agricultural implements	6	1,417	+43.9	39,034	+43.7
Automobiles, including bodies and parts	14	2,600	−32.9	78,042	−21.4
Brass, bronze, and copper products	9	1,060	−10.6	29,434	−12.1
Engines, pumps, boilers, and tanks	9	837	+7.0	26,006	+9.0
Iron and steel forgings, bolts, nuts, etc	8	2,770	+4.3	77,936	−6.5
Structural and ornamental steel	21	3,998	−22.6	118,378	−20.9
Ship and boat building and naval repairs	6	7,129	+49.5	229,645	+42.2
Tin cans	7	2,297	+25.9	62,356	+28.4
Other iron foundry and machine shop products	75	7,886	+6.1	243,753	+10.2
Other sheet-metal products	23	1,694	−.2	52,118	−.4
Cars, locomotives, and railway repair shops	18	7,456	−1.7	220,037	−1.0
Total	196	39,144	+3.1	1,176,739	+4.8
Wood manufactures:					
Sawmills and logging	24	9,591	−2.8	254,810	−3.6
Planing mills, sash and door factories, etc	62	9,506	−6.3	256,100	−8.8
Other wood manufactures	42	4,388	−3.9	119,546	−.5
Total	128	23,485	−4.5	630,456	−5.2
Leather and rubber goods:					
Tanning	8	801	−10.6	22,461	−8.8
Finished leather products	6	448	−11.1	9,479	+3.2
Rubber products	7	2,718	+1.0	79,412	+1.6
Total	21	3,967	−3.0	111,352	−.5
Chemicals, oils, paints, etc.:					
Explosives	4	518	+11.2	14,896	+17.0
Mineral oil refining	9	12,569	+14.5	470,812	+11.6
Paints, dyes, and colors	8	708	−3.0	17,599	−1.3
Miscellaneous chemical products	12	2,133	+9.6	55,272	+14.0
Total	33	15,928	+12.8	558,579	+11.5
Printing and paper goods:					
Paper boxes, bags, cartons, etc	14	2,014	−8.6	46,426	−9.3
Printing	61	2,322	+2.7	82,973	+1.9
Publishing	16	3,595	−2.0	138,114	+2.3
Other paper products	8	990	+10.4	23,242	+13.1
Total	99	8,921	−1.2	290,755	+.9

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES AND IN TOTAL AMOUNT OF WEEKLY PAY ROLL IN 794 CALIFORNIA ESTABLISHMENTS BETWEEN JANUARY, 1926, AND JANUARY, 1927—Continued

Industry	Number of establishments reporting	Employees		Weekly pay roll	
		Number in January, 1927	Per cent of change as compared with January, 1926	Amount in January, 1927	Per cent of change as compared with January, 1926
Textiles:					
Knit goods	12	971	−2.5	$21,685	+2.2
Other textile products	6	1,578	−3.4	34,348	−3.4
Total	18	2,549	−3.0	56,033	−1.3
Clothing, millinery, and laundering:					
Men's clothing	24	2,833	−1.7	62,295	−2.5
Women's clothing	11	974	+4.2	20,177	+10.3
Millinery	6	651	+6.0	12,083	+6.4
Laundering, cleaning, and dyeing	21	3,321	+3.5	77,639	+5.1
Total	62	7,779	+1.8	172,194	+2.9
Foods, beverages, and tobacco:					
Canning, preserving of fruits and vegetables	34	4,851	+33.7	96,944	+30.0
Canning, packing of fish	7	1,253	+15.4	15,021	+10.1
Confectionery and ice cream	28	1,694	+.6	42,979	+5.1
Groceries, not elsewhere specified	5	488	−9.1	11,024	+1.2
Bread and bakery products	23	3,519	+.2	107,437	+4.0
Sugar	5	2,806	−3.8	73,034	−8.5
Slaughtering and meat products	16	2,855	−9.1	85,589	−8.5
Cigars and other tobacco products	5	1,002	+18.4	16,983	+4.5
Beverages	2	142	+3.6	5,099	−6.6
Dairy products	11	2,626	+13.0	90,360	+19.2
Flour and grist mills	13	1,206	−6.6	33,798	−.6
Ice manufactures	6	727	−8.2	23,746	−3.8
Other food products	13	919	−3.7	20,188	−5.3
Total	168	24,088	+5.4	622,202	+4.7
Water, light, and power	5	7,891	−11.8	243,607	−9.3
Miscellaneous	12	2,182	+4.6	57,574	+4.3
Grand total, all industries	794	143,317	+1.4	4,120,847	+2.3

Illinois

THE following table, showing the changes in employment and earnings in Illinois factories in January, 1927, as compared with December, 1926, was taken from the February, 1927, issue of the Labor Bulletin, published by the Illinois Department of Labor:

CHANGES IN EMPLOYMENT AND EARNINGS IN ILLINOIS FACTORIES FROM DECEMBER, 1926, TO JANUARY, 1927

Industry	Per cent of change December, 1926, to January, 1927			
	Employment			Total earnings
	Males	Females	Both sexes	
Stone, clay, and glass products:				
Miscellaneous stone and mineral products	−11.2	−13.2	−11.2	−8.8
Lime, cement, and plaster	−1.1	−11.1	−1.2	−5.2
Brick, tile, and pottery	−8.9	−21.3	−9.1	−12.1
Glass	−1.8	−6.6	−3.9	−4.1
Total	−6.4	−9.0	−7.1	−8.4
Metals, machinery, conveyances:				
Iron and steel	−3.2	−7.4	−3.2	−4.1
Sheet-metal work and hardware	+4.5	+7.2	+4.0	+5.4
Tools and cutlery	−1.6	−3.3	−1.8	−5.7
Cooking, heating, ventilating apparatus	.0	+2.4	+.1	−.4
Brass, copper, zinc, babbitt metal	.0	+2.0	.0	+1.5
Cars and locomotives	+1.7	−21.8	+1.2	−6.8
Automobiles and accessories	−1.7	−22.2	−4.5	−12.8
Machinery	−1.4	+1.7	−1.7	−11.2
Electrical apparatus	−3.8	−7.3	−2.6	−9.9
Agricultural implements	−2.9	0.0	−2.9	−7.0
Instruments and appliances	−4.5	−14.9	−8.4	−6.4
Watches, watch cases, clocks, and jewelry	−1.7	−1.6	−1.7	−13.4
Total	−1.7	−4.2	−2.0	−6.3
Wood products:				
Sawmill and planing-mill products	−6.2	−15.1	−6.3	−7.8
Furniture and cabinet work	−3.2	+1.5	−2.8	−10.6
Pianos, organs, and other musical instruments	−8.3	−9.8	−7.8	−36.1
Miscellaneous wood products	−8.5	−10.3	−8.7	−5.7
Household furnishings	−.6	+2.7	+.5	−2.1
Total	−5.3	−2.4	−5.0	−14.2
Furs and leather goods:				
Leather	+2.6	−2.5	+1.9	+3.1
Furs and fur goods	−34.2	−22.2	−29.2	−36.3
Boots and shoes	+1.9	+5.2	+3.1	+1.5
Miscellaneous leather goods	−13.0	−7.2	−9.7	−17.1
Total	.0	+1.6	+1.4	−.2
Chemicals, oils, paints, etc.:				
Drugs and chemicals	+1.2	+8.7	+4.8	+1.8
Paints, dyes, and colors	−.4	+8.7	+.9	−3.4
Mineral and vegetable oil	+3.0	−8.4	+2.3	−2.3
Miscellaneous chemical products	−.1	+2.2	+.2	−13.6
Total	+1.5	+4.3	+1.9	−4.6
Printing and paper goods:				
Paper boxes, bags, and tubes	+0.9	−7.7	−1.7	−3.9
Miscellaneous paper goods	0.0	−6.3	−2.7	−5.7
Job printing	+3.0	+1.3	+2.4	+2.1
Newspapers and periodicals	−.5	+9.3	−.5	−6.5
Edition bookbinding	−2.9	−8.4	−4.4	−13.6
Total	+1.4	−2.5	+.1	−2.5

CHANGES IN EMPLOYMENT AND EARNINGS IN ILLINOIS FACTORIES FROM DECEMBER, 1926, TO JANUARY, 1927—Continued

Industry	Per cent of change December, 1926, to January, 1927			
	Employment			Total earnings
	Males	Females	Both sexes	
Textiles:				
Cotton and woolen goods	−2.7	+3.0	−0.3	+0.6
Knit goods, cotton and woolen hosiery	+3.7	−8.4	+.5	−3.0
Thread and twine	−1.9	+11.0	+1.7	−8.7
Total	−.9	+1.7	+.8	−4.9.
Clothing, millinery, laundering:				
Men's clothing	+1.3	+.7	+.2	+11.7
Men's shirts and furnishings	+5.6	−6.3	−8.7	−8.3
Overalls and work clothing	+6.3	−3.7	−2.6	−4.6
Men's hats and caps	0.0	+12.5	+4.2	+9.2
Women's clothing	+16.5	+10.3	+11.8	+26.5
Women's underwear	+44.9	−6.6	−3.2	+3.8
Women's hats	−6.7	+15.5	+9.6	+29.1
Laundering, cleaning and dyeing	+1.6	+2.0	+1.9	+.5
Total	+2.4	+2.1	+.8	+10.5
Food, beverages, and tobacco:				
Flour, feed and other cereal products	−1.8	+11.9	−.8	−2.1
Fruit and vegetable canning and preserving	−3.1	−18.5	−5.8	−3.8
Miscellaneous groceries	−2.8	−13.3	−4.6	+1.3
Slaughtering and meat packing	−3.8	−6.2	−4.1	−3.0
Dairy products	−10.4	−13.5	−11.3	−10.7
Bread and other bakery products	−.1	−1.4	−.6	+7.6
Confectionery	+5.1	+5.1	+2.1	+1.2
Beverages	−.4	−22.1	+1.1	+.4
Cigars and other tobacco products	−3.3	−4.6	−4.0	−5.6
Manufactured ice	+.5	----------	+.5	+1.2
Ice cream	−2.7	+10.4	−1.7	−4.1
Total	−3.2	−4.4	−3.3	−1.7
Total, all manufacturing industries	−1.9	−1.6	−1.9	−4.6
Trade—wholesale and retail:				
Department stores	−4.6	−18.0	−13.0	−11.9
Wholesale dry goods	+.5	−4.4	−2.1	−.7
Wholesale groceries	−1.1	−4.5	−2.0	−5.8
Mail order houses	−11.0	−5.5	−8.0	−15.3
Total	−8.8	−9.1	−8.6	−14.1
Public utilities:				
Water, light, and power	−1.6	+3.1	−.2	−.5
Telephone	−.3	−1.9	−1.4	+1.8
Street railways	+.6	−.5	+.5	−1.8
Railway car repair shops	−4.8	+5.5	−4.7	−9.3
Total	−1.1	−1.7	−1.0	−1.4
Coal mining	+.3	----------	+.3	−3.8
Building and contracting:				
Building construction	−15.1	----------	−15.1	−5.1
Road construction	−35.8	----------	−35.8	−17.2
Miscellaneous contracting	−24.0	----------	−24.0	−24.5
Total	−16.9	----------	−16.9	−7.9
Grand total, all industries	−2.4	−2.5	−2.3	−4.3

Iowa

THE February, 1927, issue of the Iowa Employment Survey, published by the bureau of labor of that State, shows the following changes in volume of employment from January to February, 1927:

CHANGES IN VOLUME OF EMPLOYMENT IN IOWA, JANUARY TO FEBRUARY, 1927

Industry	Number of firms reporting	Employees on pay roll February, 1927	
		Number	Per cent of change as compared with January, 1927
Food and kindred products:			
Meat packing	7	6,346	−1.1
Cereals	3	1,233	+5.7
Flour	3	96	−2.1
Bakery products	7	842	+3.3
Confectionery	6	321	−2.7
Poultry, produce, butter, etc	7	776	−8.2
Sugar, starch, sirup, glucose, etc	3	318	+3.6
Other food products, coffee, etc	9	288	+1.1
Total	45	10,220	−.4
Textiles:			
Clothing, men's	10	1,047	+18.8
Millinery	2	154	+5.1
Clothing, women's, and woolen goods	3	530	+6.9
Hosiery, awnings, etc	6	684	+.7
Buttons, pearl	8	729	+20.7
Total	29	3,144	+12.4
Iron and steel works:			
Foundry and machine shops	28	2,029	+7.4
Brass, bronze products, plumbers' supplies	7	634	+7.5
Autos, tractors, and engines	7	2,323	−3.1
Furnaces	5	221	+.9
Pumps	4	362	−3.2
Agricultural implements	11	1,193	+3.5
Washing machines	5	2,403	+2.5
Total	67	9,165	+2.2
Lumber products:			
Millwork, interiors, etc	15	2,189	+11.4
Furniture, desks, etc	8	1,075	−.5
Refrigerators	3	159	−8.6
Coffins, undertakers' supplies	3	101	+1.0
Carriages, wagons, truck bodies	4	86	+41.0
Total	33	3,610	+10.0
Leather products:			
Shoes	2	248	−3.1
Saddlery and harness	6	290	+9.0
Fur goods and tanning	4	63	−10.0
Gloves and mittens	2	176	−18.5
Total	14	777	−3.8
Paper products, printing and publishing:			
Paper products	5	352	−.4
Printing and publishing	14	2,507	+2.2
Total	19	2,859	+1.9
Patent medicines, chemicals, and compounds	7	320	+3.2
Stone and clay products:			
Cement, plaster, gypsum	8	1,864	+3.4
Brick and tile	14	574	−11.7
Marble and granite, crushed rock and stone	4	88	+4.8
Total	26	2,526	−.4
Tobacco and cigars	2	267	+1.5
Railway car shops	6	8,078	+5.4
Various industries:			
Auto tires and tubes	2	146	+2.8
Brooms and brushes	4	145	−5.9
Laundries	5	228	−.9
Mercantile	7	2,562	−5.5
Public service	3	3,815	+.1
Seeds	3	603	+15.7
Wholesale houses	26	1,329	−1.2
Commission houses	8	216	−.9
Other industries	9	1,314	+2.3
Total	67	10,358	−.6
Grand total	315	51,324	+2.4

Maryland

THE following report on volume of employment in Maryland from January to February, 1927, covering 41,626 employees and a pay roll totaling $1,058,952, was furnished by the commissioner of labor and statistics of Maryland:

CHANGES IN EMPLOYMENT IN IDENTICAL ESTABLISHMENTS IN MARYLAND IN FEBRUARY, 1927

Industry	Establishments reporting both months	Employment		Pay roll	
		Number of employees February, 1927	Change as compared with January, 1927	Amount, February, 1927	Change as compared with January, 1927
Bakery	4	394	+1.2	$10,897	+5.2
Boots and shoes	6	1,118	+5.8	19,672	+5.4
Boxes, fancy and paper	8	391	+4.2	5,024	+5.0
Boxes, wooden	3	144	+2.8	2,678	+2.3
Brass and bronze	4	2,368	−1.7	58,824	−.3
Brick, tile, etc	3	283	+3.6	7,297	+3.4
Brushes	5	654	−2.0	12,121	+1.5
Chemicals	4	692	−7.9	17,332	−2.9
Clothing, men's outer garments	5	2,452	−2.3	54,525	−3.8
Clothing, women's outer garments	4	725	+4.0	9,520	+2.8
Confectionery	6	828	−4.7	11,770	−2.1
Cotton goods	5	2,285	+3.3	38,225	+2.2
Fertilizer	5	696	+40.8	15,159	+36.4
Food preparation	3	112	+4.6	2,693	+2.8
Foundry	9	1,051	−3.5	26,674	−2.7
Furnishing goods, men's	5	825	+11.0	11,873	+24.6
Furniture	10	892	−14.9	23,008	+2.2
Glass manufacture	3	1,052	−6.1	23,541	−4.8
Ice cream	3	154		4,965	+1.3
Leather goods	5	655	+.6	12,878	+2.7
Lithographing	3	526	−2.3	15,679	−.8
Lumber and planing	8	502	−2.6	12,227	+2.0
Mattresses and spring beds	4	146	−.7	3,648	−4.3
Pianos	3	959	−1.1	27,664	−4.3
Plumbers' supplies	4	1,553	+12.9	41,369	+3.6
Printing	6	975	+.8	35,728	+.2
Rubber tire manufacture	1	2,628	+3.2	164,487	+64.1
Shipbuilding	3	664	+18.5	16,944	−2.0
Shirts	3	444	+8.5	5,148	+6.3
Stamping and enameling ware	3	1,090	+4.7	20,926	−3.0
Tinware	4	2,774	+1.2	59,891	+1.0
Tobacco	7	908	−.6	12,934	−14.8
Umbrellas	3	316	−3.7	4,864	−3.6
Miscellaneous	21	5,237	+5.7	115,492	+2.7

Massachusetts

A PRESS release from the Department of Labor and Industries of Massachusetts shows the following changes in volume of employment in various industries in that State from December, 1926, to January, 1927:

NUMBER OF EMPLOYEES IN 1,063 MANUFACTURING ESTABLISHMENTS IN MASSACHUSETTS, WEEK INCLUDING OR ENDING NEAREST TO DECEMBER 15, 1926, AND JANUARY 15, 1927

Industry	Number of establishments	Number of wage earners employed			
		December, 1926	January, 1927		
			Full time	Part time	Total
Automobiles, including bodies and parts	16	2,031	1,054	1,420	2,474
Bookbinding	15	961	622	332	954
Boot and shoe cut stock and findings	45	2,340	1,803	498	2,301
Boots and shoes	90	24,230	17,768	8,103	25,871
Boxes, paper	27	2,313	1,338	805	2,143
Boxes, wooden packing	13	1,030	674	323	997
Bread and other bakery products	51	4,252	4,023	131	4,154
Carpets and rugs	5	3,568	3,632		3,632
Cars and general shop construction and repairs, steam railroads	4	2,929	2,788	161	2,949
Clothing, men's	30	4,210	3,513	422	3,935
Clothing, women's	34	1,525	1,180	373	1,553
Confectionery	18	3,944	3,050	620	3,670
Copper, tin, sheet iron, etc	15	514	463	31	494
Cotton goods	56	42,485	39,032	3,593	42,625
Cutlery and tools	20	2,097	1,523	548	2,071
Dyeing and finishing textiles	10	6,663	6,140	543	6,683
Electrical machinery, apparatus, and supplies	16	10,769	10,140	491	10,631
Foundry products	27	2,929	1,760	1,051	2,811
Furniture	38	4,134	3,139	765	3,904
Gas and by-products	13	1,270	1,150	126	1,276
Hosiery and knit goods	12	5,082	3,732	1,593	5,325
Jewelry	35	2,452	1,796	536	2,332
Leather, tanned, curried, and finished	32	6,552	6,543	15	6,558
Machine-shop products	46	8,275	7,671	593	8,264
Machine and other tools	27	2,747	2,692	29	2,721
Musical instruments	13	1,310	859	432	1,291
Paper and wood pulp	26	6,635	5,702	916	6,618
Printing and publishing, book and job	51	4,428	3,502	823	4,325
Printing and publishing, newspaper	18	2,460	2,428		2,428
Rubber footwear	3	9,458	9,459		9,459
Rubber goods	7	3,124	1,643	1,326	2,969
Silk goods	10	4,182	1,850	2,321	4,171
Slaughtering and meat packing	5	1,656	1,356	333	1,689
Stationery goods	12	2,002	1,550	66	1,616
Steam fittings and steam and hot water heating apparatus	9	1,779	1,756		1,756
Stoves and stove linings	5	1,695	69	1,173	1,242
Textile machinery and parts	13	4,339	940	3,263	4,203
Tobacco	5	846	80	159	239
Woolen and worsted goods	60	20,646	13,640	6,609	20,249
All other industries	131	29,734	24,836	4,477	29,313
Total, all industries	1,063	243,596	196,896	45,000	241,896

New York

THE following statistics on changes in employment and pay rolls in New York State factories in January, 1927, were furnished by the New York State Department of Labor. The table is based on a fixed list of approximately 1,600 factories, whose weekly pay roll for the middle week of January was $14,286,409.

CHANGES IN EMPLOYMENT AND PAY ROLL IN NEW YORK STATE FACTORIES FROM JANUARY, 1926, AND DECEMBER, 1926, TO JANUARY, 1927

Industry	Per cent of change			
	December, 1926, to January, 1927		January, 1926, to January, 1927	
	Employment	Pay roll	Employment	Pay roll
Stone, clay, and glass:				
Miscellaneous stone and minerals	−4.5	−2.9	−5.6	(1)
Lime, cement, and plaster	−15.0	−17.6	−12.2	−14.3
Cement	−21.3	−28.9	−21.1	−26.2
Brick, tile, and pottery	−5.1	−5.6	+4.4	+7.2
Brick	−14.6	−12.3	+11.0	+20.4
Pottery	+2.4	−.3	+2.3	+2.3
Glass	−2.1	−7.9	−1.8	−5.1
Total	−6.7	−8.5	−3.8	−3.3
Metals and machinery:				
Silver and jewelry	−2.5	−5.0	−1.6	+2.3
Brass, copper, and aluminum	+1.0	+.3	−3.7	−3.3
Iron and steel	−2.6	−4.1	−13.1	−15.9
Structural and architectural iron	−8.4	−9.6	−12.2	−10.6
Sheet metal and hardware	−2.7	−3.2	−5.5	−4.6
Hardware	+7.7	+5.2	−5.6	−3.7
Stamped and enameled ware	+.3	+.7	−13.0	−11.9
Firearms, tools, and cutlery	−.8	−4.1	+22.2	+17.0
Cutlery and tools	−1.0	−3.1	+9.2	+6.1
Cooking, heating, ventilating apparatus	+11.5	+21.0	−20.2	−21.8
Steam and hot-water heating	+13.3	+25.8	−19.6	−20.2
Stoves	−4.5	−20.8	−18.8	−28.6
Machinery, including electrical apparatus	−2.8	+2.6	−8.4	−5.6
Agricultural implements	+2.9	−1.6	−6.9	−11.3
Electrical machinery and appliances	−5.0	−4.1	−14.4	−14.9
Foundries and machine shops	−2.7	−3.0	−2.2	−6.1
Automobiles, carriages and aeroplanes	−1.7	−.4	−14.3	−13.2
Automobiles and parts	−1.4	+.3	−15.4	−14.0
Railroad equipment and repair	−11.2	−13.1	−7.9	−5.3
Locomotives and equipment	−23.7	−25.6	−19.3	−21.0
Railway repair shops	−3.6	−5.6	−1.2	+5.2
Boat and ship building	−4.0	−18.4	+3.3	+3.8
Instruments and appliances	(2)	−2.3	+5.5	+6.9
Total	−2.9	−2.3	−6.8	−5.8
Wood manufactures:				
Saw and planing mills	+.1	−5.1	+.4	+2.6
Millwork	−1.7	−9.1	−4.4	−.8
Sawmills	+3.8	+2.8	+13.6	+12.1
Furniture and cabinet work	−1.3	−4.0	−3.0	−2.7
Furniture	+1.0	−2.0	−.3	−1.0
Pianos and other musical instruments	−10.4	−12.2	−8.5	−4.7
Miscellaneous wood, etc	−1.6	−2.4	−2.1	−1.1
Total	−3.4	−6.2	−3.6	−1.9
Furs, leather, and rubber goods:				
Leather	+4.2	+5.6	+12.5	+20.9
Furs and fur goods	−18.4	−25.3	−15.0	−11.0
Shoes	−.4	−.2	−5.3	−1.5
Other leather and canvas goods	−8.4	−11.4	−4.7	+4.1
Rubber and gutta percha	−8.5	−7.2	−11.7	−8.2
Pearl, horn, bone, etc	−3.8	−9.3	−9.2	−9.4
Total	−2.6	−3.9	−5.4	−1.2

[1] No change.

[2] Change of less than one-tenth of 1 per cent.

CHANGES IN EMPLOYMENT AND PAY ROLL IN NEW YORK STATE FACTORIES FROM JANUARY, 1926, AND DECEMBER, 1926, TO JANUARY, 1927—Continued

Industry	Per cent of change			
	December, 1926, to January, 1927		January, 1926, to January, 1927	
	Employment	Pay roll	Employment	Pay roll
Chemicals, oils, paints, etc.:				
Drugs and chemicals	+.7	(1)	+10.1	+14.2
Paints and colors	−1.2	−3.3	−6.0	−5.5
Oil products	−1.6	−2.4	+2.1	+3.4
Petroleum refining	+.4	+1.0	−4.4	−1.9
Miscellaneous chemicals	+1.2	+.3	+8.4	+7.4
Total	−.2	−1.1	+4.9	+6.2
Paper	−.7	−.6	−5.0	−5.3
Printing and paper goods:				
Paper boxes and tubes	−3.6	−5.6	+.8	+.4
Miscellaneous paper goods	+2.5	+3.4	+1.4	+2.4
Printing and bookmaking	−.4	+.1	+.4	+2.6
Printing, newspaper	+1.2	+.1	−.9	+1.7
Printing, book and job	−.6	−.1	+.3	+2.1
Total	−.3	(2)	+.6	+2.4
Textiles:				
Silk and silk goods	+2.5	+.2	−18.9	−19.1
Wool manufactures	+1.8	+.7	+3.6	+8.8
Carpets and rugs	+3.2	+1.9	+4.9	+11.2
Woolens and worsteds	−5.2	−5.3	−8.0	−2.0
Cotton goods	−1.0	−8.2	−.7	−6.4
Knit goods (except silk)	−1.3	−.4	−15.2	−17.9
Other textiles	+3.1	−3.8	−2.7	−4.3
Dyeing and finishing	−.7	−3.1	−3.7	−2.2
Total	+1.1	−1.4	−6.4	−5.1
Clothing and millinery:				
Men's clothing	+3.4	+8.0	−8.3	−10.4
Men's furnishings	−2.2	−4.1	−14.2	−13.2
Shirts and collars	−1.6	−2.6	−13.8	−22.1
Women's clothing	+2.4	+7.4	−2.2	+2.2
Women's underwear	−4.0	−2.3	−.3	−.3
Women's headwear	+4.3	+11.6	+4.5	+10.8
Miscellaneous sewing	−2.8	−4.2	−5.0	−3.1
Laundering and cleaning	−.8	+1.2	+2.8	+4.2
Total	+.8	+4.6	−6.3	−5.9
Food and tobacco:				
Flour, feed, and cereals	−2.8	−.7	−8.4	−8.6
Flour	−.7	(1)	−13.4	−14.7
Canning and preserving	−19.6	−15.1	−14.9	−10.7
Other groceries	+.3	+2.7	−11.5	−3.4
Sugar refining	−2.8	+.3	−21.6	−18.8
Meat and dairy products	+.6	+.8	−2.6	−3.6
Meat packing	+1.0	+1.4	−2.6	−3.4
Bakery products	−.6	−1.6	−.2	+1.1
Candy	−11.2	−13.1	−3.0	−1.1
Beverages	−1.3	−1.6	+.1	+3.4
Tobacco	−9.3	−8.3	−23.0	−25.0
Total	−3.8	−3.1	−7.0	−5.7
Water, light, and power	−1.0	−2.0	+2.6	+5.0
Total, all industries	−1.9	−2.0	−5.2	−3.9

[1] No change. [2] Change of less than one-tenth of 1 per cent.

Oklahoma

THE data given below, from the February 15, 1927, issue of the Oklahoma Labor Market, show the changes in employment and pay rolls in 710 establishments in Oklahoma from December, 1926, to January, 1927:

CHANGES IN EMPLOYMENT AND PAY ROLLS IN 710 INDUSTRIAL ESTABLISHMENTS IN OKLAHOMA, DECEMBER, 1926, TO JANUARY, 1927

Industry	Number of plants reporting	January, 1927			
		Employment		Pay roll	
		Number of employees	Per cent of change as compared with December, 1926	Amount	Per cent of change as compared with December, 1926
Cottonseed oil mills	13	390	−4.2	$7,805	−4.3
Food production:					
Bakeries	35	579	0.0	14,371	−4.2
Confections	7	62	−30.3	985	−19.2
Creameries and dairies	11	139	−4.1	2,612	−2.9
Flour mills	44	369	−2.1	8,735	−3.3
Ice and ice cream	33	295	−9.8	8,089	−10.0
Meat and poultry	14	1,437	−6.1	34,934	−4.0
Lead and zinc:					
Mines and mills	46	3,176	−5.8	93,630	−5.4
Smelters	17	2,229	−2.0	63,116	−2.4
Metals and machinery:					
Auto repairs, etc	29	1,155	−.2	28,350	−28.3
Machine shops and foundries	33	1,209	+8.4	34,250	+4.5
Tank construction and erection	16	751	−3.5	20,259	+1.3
Oil industry:					
Production and gasoline manufacture	123	4,409	+2.9	138,687	+5.8
Refineries	66	5,989	−1.4	197,970	−3.4
Printing: Job work	24	262	−.8	8,098	+.5
Public utilities:					
Steam railroad shops	11	1,792	−.6	50,961	−2.6
Street railways	6	725	+7.2	17,668	+2.0
Water, light, and power	50	1,199	+.3	32,966	0.0
Stone, clay, and glass:					
Brick and tile	11	332	+13.07	7,301	+19.2
Cement and plaster	6	864	−3.0	23,177	−5.5
Crushed stone	6	211	−12.4	3,520	−9.9
Glass manufacture	9	1,205	+23.0	27,579	+4.8
Textiles and cleaning:					
Textile manufacture	9	292	−9.9	4,189	−5.2
Laundries and cleaning	52	1,325	−2.5	24,503	+.2
Woodworking:					
Sawmills	14	407	+.5	5,600	+15.03
Millwork, etc	20	338	+3.0	8,924	+1.4
Total, all industries	710	31,141	−.4	868,279	−2.1

Wisconsin

THE February, 1927, issue of the Wisconsin Labor Market, issued by the State industrial commission, contains the following data on volume of employment in Wisconsin industries in January, 1927:

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES AND IN TOTAL AMOUNT OF PAY ROLL IN IDENTICAL ESTABLISHMENTS IN WISCONSIN FROM JANUARY, 1926, AND DECEMBER, 1926, TO JANUARY, 1927

Industry	Per cent of change			
	December, 1926, to January, 1927		January, 1926, to January, 1927	
	Employment	Pay roll	Employment	Pay roll
Manual				
Agriculture			+18.5	
Logging	+5.9		−12.7	
Mining	−.5	−3.1	−5.9	−1.9
Lead and zinc	−3.2	−2.7	−16.1	−5.9
Iron	+5.9	−3.9	+27.6	+8.4
Stone crushing and quarrying	+1.4	−3.7	+5.4	−4.1
Manufacturing	−.9	−1.0	−6.4	−8.3
Stone and allied industries	−7.3	−5.9	+8.8	−4.1
Brick, tile, and cement blocks	−12.7	−3.1	+14.9	+8.8
Stone finishing	−5.4	−6.6	+6.9	−6.7
Metal	+1.1	+6.3	−9.9	−14.5
Pig iron and rolling-mill products	−12.4	−13.4	−47.0	−47.4
Structural iron work	0.0	0.0	+13.0	+17.4
Foundries and machine shops	+2.9	+2.6	−11.1	−10.9
Railroad repair shops	−.6	−3.9	+2.3	+4.5
Stoves	−5.4	−15.0	−21.5	−34.2
Aluminum and enamelware	+.6	−8.5	−2.6	−.9
Machinery	−.1	−3.5	−16.8	−10.7
Automobiles	+4.8	+63.3	−8.7	−40.1
Other metal products	+3.1	+27.6	+3.2	−6.0
Wood	+1.0	−4.4	−9.4	−7.0
Sawmills and planing mills	+3.9	+4.0	−20.9	−17.7
Box factories	+4.7	+5.5	+14.7	+11.9
Panel and veneer mills	+6.7	−.3	−2.2	−.3
Furniture	−2.1	−13.1	−4.8	−5.6
Sash, door, andi nterior finish	0.0	−6.3	−6.6	+.5
Other wood products	−4.0	−10.3	−4.1	−5.9
Rubber	+1.3	−4.7	−5.8	−5.1
Leather	−5.4	−10.2	−9.4	−13.4
Tanning	−10.2	−12.9	−34.7	−40.1
Boots and shoes	−3.4	−7.1	+14.6	+24.4
Other leather products	−2.9	−12.2	+4.0	−7.8
Paper	+.1	−4.1	+2.7	−1.7
Paper and pulp mills	+.7	−4.8	+4.8	−1.5
Paper boxes	−2.2	−4.3	+1.1	−1.3
Other paper products	−.8	0.0	−5.5	−3.3
Textiles	−1.9	−8.8	−2.1	−1.2
Hosiery and other knit goods	−1.3	−10.6	−3.1	+.2
Clothing	−5.4	−8.6	−.4	−1.7
Other textile products	+3.4	−2.1	−1.7	−4.6
Foods	−6.4	−6.1	−5.2	−4.3
Meat packing	−2.9	+5.2	−16.5	−13.4
Baking and confectionery	−3.8	−7.3	−2.1	−1.9
Milk products	+2.2	−1.0	−1.9	+3.0
Canning and preserving	−3.6	−8.4	+10.9	+7.8
Flour mills	+.8	−2.6	−35.8	−32.4
Tobacco manufacturing	+2.9	−2.0	+4.9	−3.3
Other food products	−27.1	−20.2	+1.3	+.8
Light and power	−7.3	−6.6	+13.6	+20.8
Printing and publishing	−2.3	−3.4	+2.1	+4.4
Laundering, cleaning, and dyeing	−.4	−.2	+.8	−1.0
Chemical (including soap, glue, and explosives)	−1.1	+3.2	−13.5	−8.3
Construction:				
Building	−9.8	−6.4	−24.6	−8.1
Highway	−43.7		+9.1	
Railroad	−14.3	−11.5	−8.0	+6.9
Marine, dredging, sewer-digging	+20.0	−4.4	−40.0	−46.6
Communication:				
Steam railways	−3.8	−6.1	−.9	−.1
Electric railways	−13.7	−2.0	−2.0	+3.3
Express, telephone, and telegraph	−4.8	−.7	+.5	+.5
Wholesale trade	−3.7	+.6	+10.0	+21.2
Hotels and restaurants	+.2		−8.1	
Nonmanual				
Manufacturing, mines, and quarries	−.1	+1.9	+5.7	+6.7
Construction	+3.4	+6.7	.0	+5.3
Communication	−.5	+.6	+1.0	+2.9
Wholesale trade	−.6	−.1	−13.8	−9.4
Retail trade—Sales force only	−29.9	−21.4	−5.6	−6.8
Miscellaneous professional services	0.0	−8.8	+7.2	−4.9
Hotels and restaurants	−2.2		−3.2	

Plan for National Collection of Employment Statistics

A PLAN for the national collection of employment statistics, as well as detailed methods for compiling and interpreting such statistics, are contained in the report of the committee on governmental labor statistics of the American Statistical Association.[1] This committee was appointed in 1922, following the meeting of President Harding's Conference on Unemployment in the fall of 1921. At the close of this conference, Mr. Herbert Hoover appointed a committee on unemployment and business cycles to make an exhaustive study of the fundamental factors in employment and the practical measures which could be taken to prevent or mitigate unemployment.

The first recommendation of the committee was that the "collection of fundamental data" by governmental bureaus should be standardized and extended; that they should be current, periodic, and in comparable form for many industries; that they should be uniform and continuous; that agreement should be reached as to uniform definitions of terms and simplification of material; and that representatives of the various industries should aid the governmental bureaus in working out the questions to be asked and in securing the cooperation of their respective industries in establishing the habit of regular, prompt, and accurate reporting.

Purpose of Committee on Governmental Labor Statistics

ACCORDING to the committee's report, the problem on which the committee on governmental labor statistics has worked may be summed up in this question: How can the essential facts which show whether the wage earners of the United States are at work or out of work be made available periodically, promptly, and intelligibly for those who must take action whenever the information indicates an abnormal condition of business?

The committee was composed of representatives of various Federal and State bureaus in which data bearing on employment were being collected or whose cooperation in collecting and making them available was needed. Statisticians familiar with the uses of employment statistics were also included in the membership of the committee. At the same time, at the request of Mr. Hoover, the Russell Sage Foundation made an appropriation for a study of employment statistics, with a view to improving, standardizing, and extending them. This appropriation was used for the expenses of the committee. Instead of having an investigation made to give the basis for recommendations to governmental bureaus, governmental statisticians themselves came together for conference as members of the committee and reached agreements on methods and procedure which could immediately be put into effect.

[1] Employment statistics for the United States. Edited by Ralph G. Hurlin and William A. Berridge. New York, 1926.

Plans Recommended by the Committee

ELEVEN specific recommendations were adopted by the committee, as follows:

Coordination of Bureaus

1. That the coordinating center be the Federal Bureau of Labor Statistics in the Department of Labor at Washington, and that there all statistics of employment collected by any other Federal bureau in the discharge of its administrative responsibilities, or by any State bureau, be gathered together, coordinated, and published in a periodic report on employment throughout the Nation.

2. That the initial responsibility for the collection of the statistics be placed upon each State to secure the necessary information for its own purposes and to report to the Federal Government such a sampling of its data as is necessary for a national record.

3. That those bureaus or departments in the Federal Government having a direct relation to certain industries collect employment data for those industries and report them to the Federal Bureau of Labor Statistics: The Bureau of Mines for mines and quarries; the Interstate Commerce Commission for railroads; the Department of Agriculture for farms.

4. That those Federal agencies having need for these statistics in their work cooperate in encouraging their extension and improvement and in giving them currency for use in business: The Federal Reserve Board in its relation to the banking system; the United States Employment Service in its task of coordinating the employment exchanges of the country and providing them with data needed in their operations; the Department of Commerce for the purpose of including adequate and timely information on employment in its publication of current business and industrial statistics, particularly in its Survey of Current Business.

Facts to be Secured

5. That the two main questions asked be (1) the total number on the pay roll, and (2) the total wages paid in one pay-roll period.

6. That the interval between reports be one month and that the questions asked be answered for the pay-roll period which includes the fifteenth of the month.

7. That the industries included—gauged by (*a*) their importance as a measure of economic activity, and (*b*) the feasibility of securing the information—be (1) manufacturing in its main industrial divisions; (2) mining and quarrying; (3) communication; (4) building construction; (5) wholesale trade; (6) retail trade; (7) logging and lumber work; (8) agriculture; and that the published reports show the facts for each of these main divisions and also separately for their important subdivisions.

8. That the selection of the sample be guided by these requirements: (*a*) It should represent a fairly equal percentage of the total number of wage earners in each branch of industry and in each subdivision. (*b*) It should include in proper proportions establishments of different size in each industrial division. (*c*) For a State as a whole or for the Nation as a whole, it should represent the various

industries in proper proportions as measured by the number of wage earners employed in the different localities in which each industry is found.

9. That each State and the more important cities be separately treated in the report, as an aid to local action and as a means of making the national record more accurate by revealing variations in different localities.

Coordination with Other Statistics

10. That coordination with other data available regarding the trends of production and business activity be secured (*a*) by increasing, if possible, the promptness with which the data become available each month; and (*b*) by publishing them in so far as possible in the form of continuous index numbers.

Special Studies

11. That more detailed data showing, for instance, employment according to sex, labor turnover, or total hours of employment of all workers on the pay roll—known as "man-hours"—be gathered from time to time by these bureaus, in order to compare the significance of such information with the evidence contained in answers to the simpler questions proposed in the plan. On the basis of these special studies, it may prove feasible in time to collect these details monthly, but for the present, until a much larger number of industries throughout the country are included, it seems wise to require only the minimum of information suggested in the two questions calling for number of employees and total pay roll.

Explanation of the Plan

THE committee's explanation of the reasons leading it to adopt the above plan are given in the report as follows:

The requirement which the committee sought to fulfill in working out this plan were first, that the data must be (*a*) periodic; (*b*) promptly available; (*c*) national in scope, making possible a national index; (*d*) inclusive of all important industries in the country, and published separately for them; (*e*) available for different sections of the country and for important cities, to reveal variations in different localities; and (*f*) simple in form, to make possible prompt and general reporting. These requirements grew naturally out of the twofold purpose of employment statistics; namely, to show (1) trends of employment and unemployment as a social condition affecting human beings and their welfare; and (2) trends of production and business activity as a guide in business policies.

Second, in its recommendations regarding the relation of bureaus to one another and the plan of coordination, the committee was mindful of the fact that statistics of employment had been collected for some time and that a feasible plan must have the sanction of this past experience and must also be related to the present organization of governmental services. It seems hardly necessary to point out the importance of a better organization than now exists in the statistical work of the Federal Government, since duplication of work between departments not only causes waste but results in giving to the public fragmentary information. With the multiplication of problems on which statistics are needed, it is natural that there should be this difficulty. Moreover, in any effort to centralize statistics in a single governmental bureau, we would face the fact that statistics which are needed in the administrative routine of a department can perhaps be most effectively gathered by that department rather than by a centralized statistical bureau. The committee's recommendations would leave untouched the present plan of collection of statistics in the department in

which they naturally belong, such as statistics of farms in the Federal Department of Agriculture and of mines in the Federal Bureau of Mines. But it would meet the need for coordination by developing a single coordinating center, which for statistics of employment, in the plan of the committee, should be the Federal Bureau of Labor Statistics.

The placing of initial responsibility upon each State for the collection of these statistics is worthy of note as constituting an effective working relationship which keeps the advantage of centralization in Washington, while retaining the convenience of local collection and use. Each State needs to include a larger number of establishments in its own area to reflect industrial activities than the Federal Government needs from the same area for a national index. It is logical and efficient, therefore, for each State to collect the data and to send to the Federal Government such portion of its returns as may be needed for a national index and for a record of each important industry in the country.

WHOLESALE AND RETAIL PRICES

Retail Prices of Food in the United States

THE following tables are compiled from monthly reports of actual selling prices[1] received by the Bureau of Labor Statistics from retail dealers:

Table 1 shows for the United States retail prices of food on February 15, 1926, and January 15 and February 15, 1927, as well as the percentage changes in the year and in the month. For example, the retail price per dozen strictly fresh eggs was 43.8 cents in February, 1926; 55.9 cents in January, 1927; and 44.2 cents in February, 1927. These figures show an increase of 1 per cent in the year and a decrease of 21 per cent in the month.

The cost of the various articles of food combined shows a decrease of 3.4 per cent on February 15, 1927, as compared with February 15, 1926, and a decrease of 2.1 per cent on February 15, 1927, as compared with January 15, 1927.

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE FEBRUARY 15, 1927, COMPARED WITH JANUARY 15, 1927, AND FEBRUARY 15, 1926

[Percentage changes of five-tenths of 1 per cent and over are given in whole numbers]

Article	Unit	Average retail price on—			Per cent of increase (+) or decrease (−) Feb. 15, 1927, compared with—	
		Feb. 15, 1926	Jan. 15, 1927	Feb. 15, 1927	Feb. 15, 1926	Jan. 15, 1927
		Cents	*Cents*	*Cents*		
Sirloin steak	Pound	40.6	40.8	40.9	+1	+0.2
Round steak	do	34.8	35.3	35.4	+2	+0.3
Rib roast	do	29.3	30.3	30.4	+4	+0.3
Chuck roast	do	22.1	22.7	22.7	+3	0
Plate beef	do	14.6	15.0	14.9	+2	−1
Pork chops	do	36.3	36.6	35.9	−1	−2
Bacon	do	48.9	48.9	48.5	−1	−1
Ham	do	53.6	56.8	56.7	+6	−0.2
Lamb	do	38.4	37.4	37.3	−3	−0.3
Hens	do	38.9	38.5	38.5	−1	0
Salmon, canned, red	do	37.6	33.5	33.2	−12	−1
Milk, fresh	Quart	14.2	14.1	14.1	−1	0
Milk, evaporated	15–16 oz. can	11.6	11.4	11.4	−2	0
Butter	Pound	54.5	58.4	58.9	+8	+1
Oleomargarine (all butter substitutes)	do	31.2	29.2	29.0	−7	−1
Cheese	do	37.5	37.6	37.6	+0.3	0
Lard	do	22.2	20.0	19.6	−12	−2
Vegetable lard substitute	do	25.6	25.2	25.2	−2	0
Eggs, strictly fresh	Dozen	43.8	55.9	44.2	+1	−21
Eggs, storage	do	34.6	45.0	37.7	+9	−16
Bread	Pound	9.4	9.4	9.4	0	0
Flour	do	6.3	5.6	5.6	−11	0
Corn meal	do	5.2	5.1	5.1	−2	0
Rolled oats	do	9.1	9.1	9.1	0	0
Corn flakes	8-oz. pkg	11.0	10.9	10.9	−1	0

[1] In addition to retail prices of food and coal, the bureau publishes the prices of gas and electricity from each of 51 cities for the dates for which these data are secured.

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE FEBRUARY 15, 1927, COMPARED WITH JANUARY 15, 1927, AND FEBRUARY 15, 1926—Continued

Article	Unit	Average retail price on—			Percent of increase (+) or decrease (−) Feb. 15, 1927, compared with—	
		Feb. 15, 1926	Jan. 15, 1927	Feb. 15, 1927	Feb. 15, 1926	Jan. 15, 1927
		Cents	*Cents*	*Cents*		
Wheat cereal	28-oz. pkg.	25.4	25.5	25.4	0	−0.4
Macaroni	Pound	20.3	20.1	20.1	−1	0
Rice	do	11.6	11.0	10.9	−6	−1
Beans, navy	do	9.6	9.2	9.2	−4	0
Potatoes	do	5.7	4.0	3.8	−33	−5
Onions	do	5.9	5.5	5.7	−3	+4
Cabbage	do	6.4	4.7	4.9	−23	+4
Beans, baked	No. 2 can	12.2	11.7	11.7	−4	0
Corn, canned	do	16.7	16.1	16.1	−4	0
Peas, canned	do	17.7	17.2	17.1	−3	−1
Tomatoes, canned	do	12.3	12.3	12.2	−1	−1
Sugar	Pound	6.7	7.5	7.5	+12	0
Tea	do	76.1	77.5	77.3	+2	−0.3
Coffee	do	51.3	50.2	49.9	−3	−1
Prunes	do	17.2	16.0	15.8	−8	−1
Raisins	do	14.5	14.4	14.4	−1	0
Bananas	Dozen	35.7	34.5	34.7	−3	+1
Oranges	do	46.5	46.9	47.1	+1	+0.4
Weighted food index					−3.4	−2.1

Table 2 shows for the United States average retail prices of specified food articles on February 15, 1913, and on February 15 of each year from 1921 to 1927, together with percentage changes in February of each of these specified years, compared with February, 1913. For example, the retail price per pound of hens was 20.7 cents in February, 1913; 42.9 cents in February, 1921; 36.9 cents in February, 1922; 35.5 cents in February, 1923; 35.1 cents in February, 1924; 36.1 cents in February, 1925; 38.9 cents in February, 1926; and 38.5 cents in February, 1927.

As compared with the average price in 1913, these figures show increases of 107 per cent in February, 1921; 78 per cent in February, 1922; 71 per cent in February, 1923; 70 per cent in February, 1924; 74 per cent in February, 1925; 88 per cent in February, 1926; and 86 per cent in February, 1927.

The cost of the various articles of food combined showed an increase of 61.1 per cent in February, 1927, as compared with February, 1913.

TABLE 2.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE, FEBRUARY 15, OF CERTAIN SPECIFIED YEARS COMPARED WITH FEBRUARY 15, 1913

[Percentage changes of five-tenths of 1 per cent and over are given in whole numbers]

Article	Unit	Average retail price on Feb. 15—								Per cent of increase Feb. 15, each specified year compared with Feb. 15, 1913						
		1913	1921	1922	1923	1924	1925	1926	1927	1921	1922	1923	1924	1925	1926	1927
		Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*							
Sirloin steak	Pound	23.9	38.3	35.2	37.1	38.7	38.5	40.6	40.9	60	47	55	62	61	70	71
Round steak	do	20.6	34.2	30.2	31.5	33.0	32.7	34.8	35.4	66	47	53	60	59	69	72
Rib roast	do	18.8	29.3	26.5	27.5	28.3	28.4	29.3	30.4	56	41	46	51	51	56	62
Chuck roast	do	14.9	22.0	18.9	19.5	20.4	20.4	22.1	22.7	48	27	31	37	37	48	52
Plate beef	do	11.3	15.6	12.8	12.8	13.3	13.2	14.6	14.9	38	13	13	18	17	29	32
Pork chops	do	18.9	32.7	29.3	28.7	26.7	30.3	36.3	35.9	73	55	52	41	60	92	90
Bacon	do	25.5	44.7	37.9	39.4	36.6	40.6	48.9	48.5	75	49	55	44	59	92	90
Ham	do	25.4	48.2	46.5	45.0	44.4	48.1	53.6	56.7	90	83	77	75	89	111	123
Lamb, leg of	do	18.5	34.2	35.4	36.0	35.7	38.3	38.4	37.3	85	91	95	93	107	108	102
Hens	do	20.7	42.9	36.9	35.5	35.1	36.1	38.9	38.5	107	78	71	70	74	88	86
Salmon, canned, red	do	----	39.1	32.9	31.3	31.2	31.4	37.6	33.2	----	----	----	----	----	----	----
Milk, fresh	Quart	8.9	15.4	13.2	13.7	14.0	13.9	14.2	14.1	73	48	54	57	56	60	58
Milk, evaporated	(1)	----	14.7	11.6	12.1	12.1	11.2	11.6	11.4	----	----	----	----	----	----	----
Butter	Pound	41.2	56.5	45.9	57.7	60.2	50.6	54.5	58.9	37	11	40	46	23	32	43
Oleomargarine (all butter substitutes)	do	----	33.7	27.9	27.8	29.8	30.2	31.2	29.0	----	----	----	----	----	----	----
Cheese	do	22.2	38.4	32.9	37.5	37.2	36.4	37.5	37.6	73	48	69	68	64	69	69
Lard	do	15.4	20.7	15.9	17.4	18.0	22.8	22.2	19.6	34	3	13	17	48	44	27
Vegetable lard substitute	do	----	25.9	21.7	22.4	24.5	25.8	25.6	25.2	----	----	----	----	----	----	----
Eggs, strictly fresh	Dozen	31.5	47.9	48.4	46.2	49.8	53.4	43.8	44.2	52	54	47	58	70	39	40
Eggs, storage	do	23.5	44.4	39.1	42.4	39.3	50.3	34.6	37.7	89	66	80	67	114	47	60
Bread	Pound	5.6	10.6	8.6	8.7	8.7	9.5	9.4	9.4	89	54	55	55	70	68	68
Flour	do	3.3	6.5	5.1	4.9	4.6	6.4	6.3	5.6	97	55	48	39	94	91	70
Corn meal	do	2.9	5.0	3.9	4.0	4.4	5.5	5.2	5.1	72	34	38	52	90	79	76
Rolled oats	do	----	10.4	8.9	8.7	8.8	9.2	9.1	9.1	----	----	----	----	----	----	----
Corn flakes	(2)	----	14.0	10.3	9.7	9.7	11.0	11.0	10.9	----	----	----	----	----	----	----
Wheat cereal	(3)	----	30.0	26.2	24.8	24.3	24.6	25.4	25.4	----	----	----	----	----	----	----
Macaroni	Pound	----	21.3	20.2	19.8	19.6	20.3	20.3	20.1	----	----	----	----	----	----	----
Rice	do	8.6	10.5	9.3	9.4	9.8	10.8	11.6	10.9	22	8	9	14	26	35	27
Beans, navy	do	----	8.6	8.3	11.3	10.0	10.4	9.6	9.2	----	----	----	----	----	----	----
Potatoes	do	1.5	2.6	3.3	2.1	2.8	2.6	5.7	3.8	73	120	40	87	73	280	153
Onions	do	----	3.9	10.9	5.3	6.0	6.3	5.9	5.7	----	----	----	----	----	----	----
Cabbage	do	----	3.6	5.7	4.7	5.4	5.0	6.4	4.9	----	----	----	----	----	----	----
Beans, baked	(4)	----	15.3	13.3	13.1	12.9	12.6	12.2	11.7	----	----	----	----	----	----	----
Corn, canned	(4)	----	17.1	15.9	15.4	15.7	17.7	16.7	16.1	----	----	----	----	----	----	----
Peas, canned	(4)	----	18.2	17.8	17.4	17.9	18.5	17.7	17.1	----	----	----	----	----	----	----
Tomatoes, canned	(4)	----	12.2	13.4	12.8	12.9	13.8	12.3	12.2	----	----	----	----	----	----	----
Sugar, granulated	Pound	5.5	8.9	6.4	8.7	10.3	7.7	6.7	7.5	62	16	58	87	40	22	36
Tea	do	54.3	71.5	67.8	68.9	70.8	74.8	76.1	77.3	32	25	27	30	38	40	42
Coffee	do	29.8	37.5	35.6	37.5	38.8	52.1	51.3	49.9	26	19	26	30	75	72	67
Prunes	do	----	22.5	18.8	19.9	17.8	17.1	17.2	15.8	----	----	----	----	----	----	----
Raisins	do	----	31.9	24.8	18.7	15.8	14.6	14.5	14.4	----	----	----	----	----	----	----
Bananas	Dozen	----	41.0	36.8	36.9	38.1	36.8	35.7	34.7	----	----	----	----	----	----	----
Oranges	do	----	45.3	48.5	47.1	39.5	44.7	46.5	47.1	----	----	----	----	----	----	----
Weighted food index [5]		----	----	----	----	----	----	----	----	62.9	46.2	46.9	52.1	56.4	66.8	61.1

[1] 15-16 ounce can.
[2] 8-ounce package.
[3] 28-ounce package.
[4] No. 2 can.
[5] Beginning with January, 1921, index numbers showing the trend in the retail cost of food have been composed of the articles shown in Tables 1 and 2, weighted according to the consumption of the average family. From January, 1913, to December, 1920, the index numbers included the following articles: Sirloin steak, round steak, rib roast, chuck roast, plate beef, pork chops, bacon, ham, lard, hens, flour, corn meal, eggs, butter, milk, bread, potatoes, sugar, cheese, rice, coffee, and tea.

Table 3 shows the changes in the retail prices of each of 22 articles of food for which prices have been secured since 1913, as well as the changes in the amounts of these articles that could be purchased for $1 in specified years, 1913 to 1926, and in January and February, 1927.

TABLE 3.—AVERAGE RETAIL PRICES OF SPECIFIED ARTICLES OF FOOD AND AMOUNT PURCHASABLE FOR $1 IN EACH YEAR, 1913 TO 1926, AND IN JANUARY AND FEBRUARY, 1927

Year	Sirloin steak		Round steak		Rib roast		Chuck roast		Plate beef		Pork chops	
	Average retail price	Amt. for $1	Average retail price	Amt. for $1	Average retail price	Amt. for $1	Average retail price	Amt. for $1	Average retail price	Amt. for $1	Average retail price	Amt. for $1
	Cents per lb.	*Lbs.*	*Cents per lb.*	*Lbs.*	*Cents per lb.*	*Lbs.*	*Cents per lb.*	*Lbs.*	*Cents per lb.*	*Lbs.*	*Cents per lb.*	*Lbs.*
1913	25.4	3.9	22.3	4.5	19.8	5.1	16.0	6.3	12.1	8.3	21.0	4.8
1920	43.7	2.3	39.5	2.5	33.2	3.0	26.2	3.8	18.3	5.5	42.3	2.4
1921	38.8	2.6	34.4	2.9	29.1	3.4	21.2	4.7	14.3	7.0	34.9	2.9
1922	37.4	2.7	32.3	3.1	27.6	3.6	19.7	5.1	12.8	7.8	33.0	3.0
1923a	39.1	2.6	33.5	3.0	28.4	3.5	20.2	5.0	12.9	7.8	30.4	3.3
1924	39.6	2.5	33.8	3.0	28.8	3.5	20.8	4.8	13.2	7.6	30.8	3.2
1925	40.6	2.5	34.7	2.9	29.6	3.4	21.6	4.6	13.8	7.2	36.6	2.7
1926	41.3	2.4	35.6	2.8	30.3	3.3	22.5	4.4	14.6	6.8	39.5	2.5
1927: January	40.8	2.5	35.3	2.8	30.3	3.3	22.7	4.4	15.0	6.7	36.6	2.7
February	40.9	2.4	35.4	2.8	30.4	3.3	22.7	4.4	14.9	6.7	35.9	2.8

Year	Bacon		Ham		Hens		Milk		Butter		Cheese	
	Cents per lb.	*Lbs.*	*Cents per lb.*	*Lbs.*	*Cents per lb.*	*Lbs.*	*Cents per lb.*	*Lbs.*	*Cents per lb.*	*Lbs.*	*Cents per lb.*	*Lbs.*
1913	27.0	3.7	26.9	3.7	21.3	4.7	8.9	11.2	38.3	2.6	22.1	4.5
1920	52.3	1.9	55.5	1.8	44.7	2.2	16.7	6.0	70.1	1.4	41.6	2.4
1921	42.7	2.3	48.8	2.0	39.7	2.5	14.6	6.8	51.7	1.9	34.0	2.9
1922	39.8	2.5	48.8	2.0	36.0	2.8	13.1	7.6	47.9	2.1	32.9	3.0
1923	39.1	2.6	45.5	2.2	35.0	2.9	13.8	7.2	55.4	1.8	36.9	2.7
1924	37.7	2.7	45.3	2.2	35.3	2.8	13.8	7.2	51.7	1.9	35.3	2.8
1925	46.7	2.1	52.6	1.9	36.6	2.7	14.0	7.1	54.8	1.8	36.7	2.7
1926	50.3	2.0	57.4	1.7	38.8	2.6	14.0	7.1	53.1	1.9	36.6	2.7
1927: January	48.9	2.0	56.8	1.8	38.5	2.6	14.1	7.1	58.4	1.7	37.6	2.7
February	48.5	2.1	56.7	1.8	38.5	2.6	14.1	7.1	58.9	1.7	37.6	2.7

Year	Lard		Eggs		Bread		Flour		Corn meal		Rice	
	Cents per lb.	*Lbs.*	*Cents per lb.*	*Lbs.*	*Cents per lb.*	*Lbs.*	*Cents per lb.*	*Lbs.*	*Cents per lb.*	*Lbs.*	*Cents per lb.*	*Lbs.*
1913	15.8	6.3	34.5	2.9	5.6	17.9	3.3	30.3	3.0	33.3	8.7	11.5
1920	29.5	3.4	68.1	1.5	11.5	8.7	8.1	12.3	6.5	15.4	17.4	5.7
1921	18.0	5.6	50.9	2.0	9.9	10.1	5.8	17.2	4.5	22.2	9.5	10.5
1922	17.0	5.9	44.4	2.3	8.7	11.5	5.1	19.6	3.9	25.6	9.5	10.5
1923	17.7	5.6	46.5	2.2	8.7	11.5	4.7	21.3	4.1	24.4	9.5	10.5
1924	19.0	5.3	47.8	2.1	8.8	11.4	4.9	20.4	4.7	21.3	10.1	9.9
1925	23.3	4.3	52.1	1.9	9.4	10.6	6.1	16.4	5.4	18.5	11.1	9.0
1926	21.9	4.6	48.5	2.1	9.4	10.6	6.0	16.7	5.1	19.6	11.6	8.6
1927: January	20.0	5.0	55.9	1.8	9.4	10.6	5.6	17.9	5.1	19.6	11.0	9.1
February	19.6	5.1	44.2	2.3	9.4	10.6	5.6	17.9	5.1	19.6	10.9	9.2

Year	Potatoes		Sugar		Tea		Coffee	
	Cents per lb.	*Lbs.*	*Cents per lb.*	*Lbs.*	*Cents per lb.*	*Lbs.*	*Cents per lb.*	*Lbs.*
1913	1.7	58.8	5.5	18.2	54.4	1.8	29.8	3.4
1920	6.3	15.9	19.4	5.2	73.3	1.4	47.0	2.1
1921	3.1	32.3	8.0	12.5	69.7	1.4	36.3	2.8
1922	2.8	35.7	7.3	13.7	68.1	1.5	36.1	2.8
1923	2.9	34.5	10.1	9.9	69.5	1.4	37.7	2.7
1924	2.7	37.0	9.2	10.9	71.5	1.4	43.3	2.3
1925	3.6	27.8	7.2	13.9	75.5	1.3	51.5	1.9
1926	4.9	20.4	6.9	14.5	76.7	1.3	51.0	2.0
1927: January	4.0	25.0	7.5	13.3	77.5	1.3	50.2	2.0
February	3.8	26.0	7.5	13.3	77.3	1.3	49.9	2.0

Index Numbers of Retail Prices of Food in the United States

IN TABLE 4 index numbers are given which show the changes in the retail prices of specified food articles, by years, from 1913 to 1926,[2] and by months for 1926, and for January and February, 1927. These index numbers, or relative prices, are based on the year 1913 as 100 and are computed by dividing the average price of each commodity for each month and each year by the average price of that commodity for 1913. These figures must be used with caution. For example, the relative price of sirloin steak for the year 1926 was 162.6, which means that the average money price for the year 1926 was 62.6 per cent higher than the average money price for the year 1913. As compared with the relative price, 159.8 in 1925, the figures for 1926 show an increase of nearly 3 points, but an increase of 1.75 per cent in the year.

In the last column of Table 4 are given index numbers showing changes in the retail cost of all articles of food combined. Since January, 1921, these index numbers have been computed from the average prices of the articles of food shown in Tables 1 and 2, weighted according to the average family consumption in 1918. (See March, 1921, issue, p. 25.) Although previous to January, 1921, the number of food articles has varied, these index numbers have been so computed as to be strictly comparable for the entire period. The index numbers based on the average for the year 1913 as 100.0 are 159.3 for January and 156.0 for February, 1927.

The curve shown in the chart on page 147 pictures more readily to the eye the changes in the cost of the food budget than do the index numbers given in the table.

TABLE 4.—INDEX NUMBERS OF RETAIL PRICES OF PRINCIPAL ARTICLES OF FOOD, BY YEARS, 1913 AND 1920 TO 1926, AND BY MONTHS FOR 1926, AND JANUARY AND FEBRUARY, 1927.

[Average for year 1913=100.0]

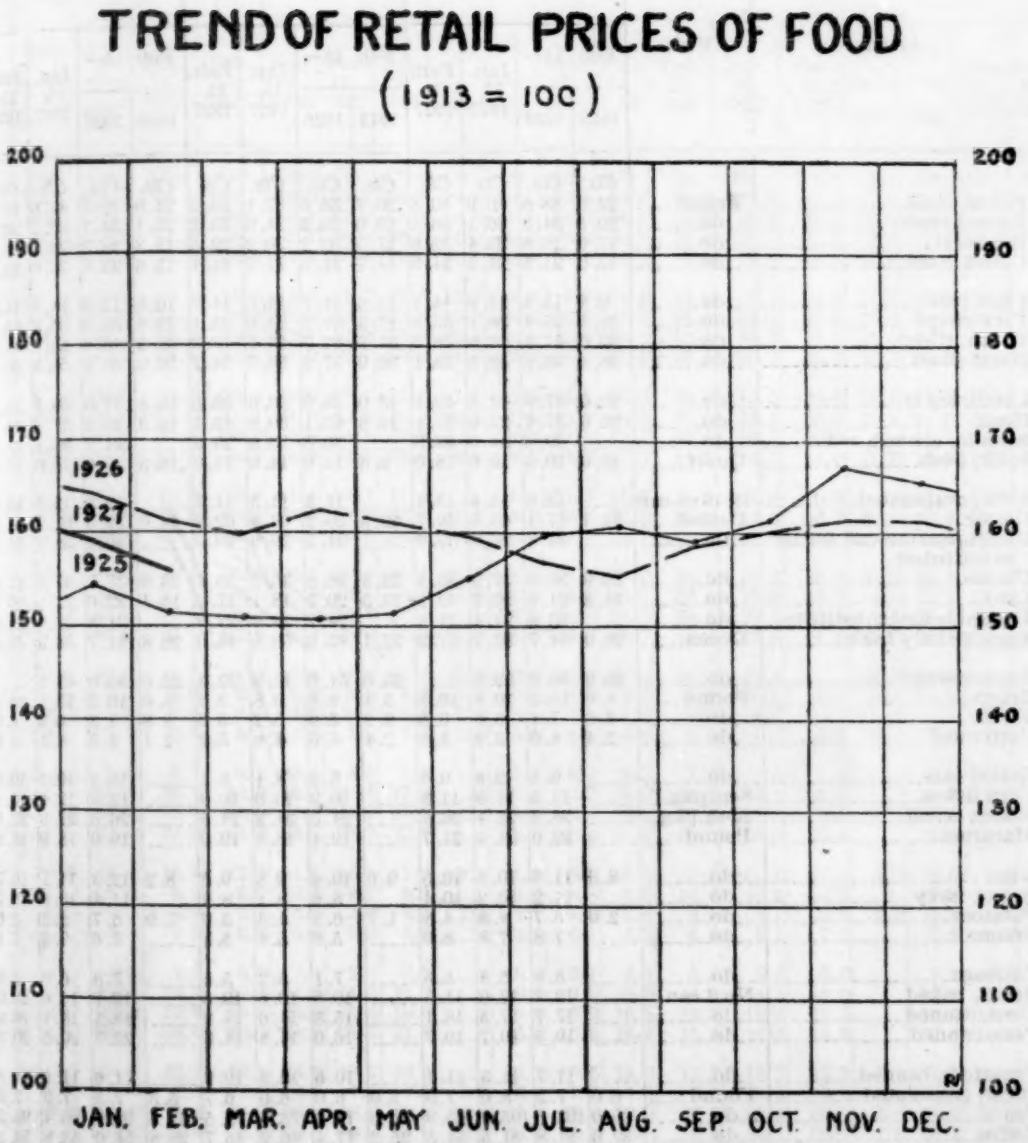
Year and month	Sirloin steak	Round steak	Rib roast	Chuck roast	Plate beef	Pork chops	Bacon	Ham	Hens	Milk	Butter	Cheese
1913	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1920	172.1	177.1	167.7	163.8	151.2	201.4	193.7	206.3	209.9	187.6	183.0	188.2
1921	152.8	154.3	147.0	132.5	118.2	166.2	158.2	181.4	186.4	164.0	135.0	153.9
1922	147.2	144.8	139.4	123.1	105.8	157.1	147.4	181.4	169.0	147.2	125.1	148.9
1923	153.9	150.2	143.4	126.3	106.6	144.8	144.8	169.1	164.3	155.1	144.7	167.0
1924	155.9	151.6	145.5	130.0	109.1	146.7	139.6	168.4	165.7	155.1	135.0	159.7
1925	159.8	155.6	149.5	135.0	114.1	174.3	173.0	195.5	171.8	157.3	143.1	166.1
1926	162.6	159.6	153.0	140.6	120.7	188.1	186.3	213.4	182.2	157.3	138.6	165.6
1926: January	160.6	157.0	151.5	138.1	119.8	173.8	178.5	198.1	181.2	159.6	144.6	170.1
February	159.8	156.1	148.0	138.1	120.7	172.9	181.1	199.3	182.6	159.6	142.3	169.7
March	160.2	156.5	151.0	138.1	120.7	177.1	179.3	200.7	185.0	157.3	139.9	168.3
April	161.8	157.8	152.5	139.4	121.5	182.4	179.6	202.6	190.1	156.2	132.9	165.2
May	163.4	160.5	153.5	140.6	120.7	191.9	182.6	207.8	192.5	156.2	130.5	162.9
June	165.4	162.3	154.5	141.9	120.7	200.0	190.7	221.9	188.7	155.1	131.3	161.5
July	165.4	162.8	155.1	141.9	119.8	198.6	193.7	226.4	184.0	155.1	130.8	161.1
August	164.6	162.3	153.5	140.6	118.2	192.9	192.6	225.7	177.9	156.2	132.1	161.5
September	165.0	163.2	154.5	141.9	119.8	202.4	192.2	224.5	177.5	157.3	137.1	163.3
October	163.4	161.4	154.5	142.5	120.7	202.9	191.5	222.3	176.5	157.3	141.8	166.1
November	161.0	159.2	152.5	141.9	121.5	187.1	188.9	217.1	174.2	158.4	145.4	167.0
December	160.2	158.3	152.5	141.9	123.1	177.1	183.7	212.3	174.6	159.6	154.8	169.2
1927: January	160.6	158.3	153.0	141.9	124.0	174.3	181.1	211.2	180.8	158.4	152.5	170.1
February	161.0	158.7	153.5	141.9	123.1	171.0	179.6	210.8	180.8	158.4	153.8	170.1

[2] For index numbers of each month, January, 1913, to December, 1925, see Bulletin No. 396, pp. 44 to 61 and Bulletin No. 418, pp. 38 to 51.

TABLE 4.—INDEX NUMBERS OF RETAIL PRICES OF PRINCIPAL ARTICLES OF FOOD, BY YEARS, 1913 AND 1920 TO 1926, AND BY MONTHS FOR 1926, AND JANUARY AND FEBRUARY, 1927—Continued

Year and month	Lard	Eggs	Bread	Flour	Corn meal	Rice	Potatoes	Sugar	Tea	Coffee	All articles[1]
1913	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1920	186.7	197.4	205.4	245.5	216.7	200.0	370.6	352.7	134.7	157.7	203.4
1921	113.9	147.5	176.8	175.8	150.0	109.2	182.4	145.5	128.1	121.8	153.3
1922	107.6	128.7	155.4	154.5	130.0	109.2	164.7	132.7	125.2	121.1	141.6
1923	112.0	134.8	155.4	142.4	136.7	109.2	170.6	183.6	127.8	126.5	146.2
1924	120.3	138.6	157.1	148.5	156.7	116.1	158.8	167.3	131.4	145.3	145.9
1925	147.5	151.0	167.9	184.8	180.0	127.6	211.8	130.9	138.8	172.8	157.4
1926	138.6	140.6	167.9	181.8	170.0	133.3	288.2	125.5	141.0	171.1	160.6
1926: January	141.1	156.2	167.9	187.9	173.3	133.3	341.2	121.8	139.9	172.1	164.3
February	140.5	127.0	167.9	190.9	173.3	133.3	335.3	121.8	139.9	172.1	161.5
March	138.6	111.6	167.9	187.9	173.3	134.5	329.4	121.8	139.9	172.1	159.9
April	136.1	111.9	167.9	184.8	170.0	134.5	394.1	120.0	140.3	171.5	162.4
May	136.1	112.8	167.9	184.8	170.0	134.5	352.9	121.8	140.4	171.1	161.1
June	143.0	118.0	167.9	184.8	170.0	134.5	294.1	125.5	141.4	171.1	159.7
July	144.9	122.0	167.9	181.8	170.0	134.5	241.2	125.5	141.5	171.5	157.0
August	143.7	130.1	167.9	181.8	170.0	133.3	211.8	127.3	141.7	171.7	155.7
September	141.1	149.3	167.9	175.8	170.0	134.5	229.4	127.3	141.5	171.1	158.5
October	138.6	168.7	167.9	172.7	170.0	133.3	223.5	129.1	142.1	170.8	160.0
November	133.5	191.3	167.9	172.7	170.0	129.9	235.3	129.1	141.7	170.5	161.6
December	129.1	189.0	167.9	169.7	170.0	128.7	235.3	132.7	141.4	170.1	161.8
1927: January	126.6	162.0	167.9	169.7	170.0	126.4	235.3	136.4	142.5	168.5	159.3
February	124.1	128.1	167.9	169.7	170.0	125.3	223.5	136.4	142.1	167.4	156.0

[1] 30 articles in 1907; 15 articles in 1908–1912; 22 articles in 1913–1920; 43 articles in 1921–1927.


TREND OF RETAIL PRICES OF FOOD
(1913 = 100)
200
190
180
170
160
150
140
130
120
110
100
1926
1927
1925
JAN. FEB. MAR. APR. MAY JUN. JUL. AUG. SEP OCT. NOV. DEC.

AVERAGE retail food prices are shown in Table 5 for 39 cities 15, 1927. For 12 other cities prices are shown for the same scheduled by the bureau until after 1913.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL

[Exact comparisons of prices in different cities can not be made for some articles,

Article	Unit	Atlanta, Ga.				Baltimore, Md.				Birmingham, Ala.			
		Feb. 15—		Jan. 15, 1927	Feb. 15, 1927	Feb. 15—		Jan. 15, 1927	Feb. 15, 1927	Feb. 15—		Jan. 15, 1927	Feb. 15, 1927
		1913	1926			1913	1926			1913	1926		
		Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
Sirloin steak	Pound	22.6	38.6	40.9	40.8	20.7	38.6	37.1	38.2	24.9	39.7	41.6	41.7
Round steak	do	20.5	34.3	36.1	36.5	19.0	35.3	34.6	35.1	20.1	34.7	35.5	36.4
Rib roast	do	17.0	28.8	32.4	32.0	17.3	30.2	29.2	29.5	19.3	28.2	28.7	28.8
Chuck roast	do	13.0	21.3	24.5	24.3	14.7	21.5	21.2	21.4	15.6	22.4	22.6	22.8
Plate beef	do	9.8	13.4	13.9	14.1	11.6	14.7	14.6	14.7	10.0	13.9	14.7	14.7
Pork chops	do	19.5	35.4	36.1	35.1	17.3	36.2	35.6	35.1	19.4	36.9	36.6	35.6
Bacon, sliced	do	30.0	47.4	46.6	46.5	21.3	42.7	43.1	42.9	31.3	48.4	48.7	48.6
Ham, sliced	do	28.5	53.6	58.5	58.1	30.0	57.2	58.3	58.2	30.0	53.5	56.3	56.4
Lamb, leg of	do	20.0	37.9	41.3	40.4	18.0	38.9	36.6	36.6	18.8	37.0	39.3	38.6
Hens	do	20.0	37.4	37.0	37.1	19.8	40.1	39.8	40.5	19.3	36.2	37.0	36.7
Salmon, canned, red	do	-----	39.0	34.0	33.8	-----	36.8	30.3	29.8	-----	41.2	35.4	35.4
Milk, fresh	Quart	10.0	19.3	19.0	18.0	8.8	13.0	14.0	14.0	10.3	20.0	18.0	17.0
Milk, evaporated	15–16 oz. can	-----	13.6	13.4	13.4	-----	11.3	11.3	11.3	-----	12.8	12.5	12.6
Butter	Pound	41.7	57.1	60.5	59.7	42.3	59.2	63.9	62.8	44.0	59.5	61.7	61.6
Oleomargarine (all butter substitutes).	do	-----	31.8	27.9	27.2	-----	31.3	29.9	29.9	-----	36.6	34.1	34.1
Cheese	do	25.0	36.0	37.3	36.9	23.3	36.8	36.2	35.4	23.0	37.7	37.6	37.4
Lard	do	14.8	21.6	20.2	19.1	13.5	20.3	18.1	17.5	15.4	22.6	21.1	20.1
Vegetable lard substitute	do	-----	23.6	21.4	21.3	-----	24.2	23.0	22.9	-----	21.8	22.5	23.0
Eggs, strictly fresh	Dozen	28.0	44.7	52.2	37.2	27.1	43.9	58.8	44.0	28.8	41.7	54.3	43.0
Eggs, storage	do	25.0	40.0	39.0	-----	23.0	31.0	42.9	32.3	25.0	35.0	43.3	-----
Bread	Pound	6.0	10.3	10.8	10.8	5.4	9.8	9.8	9.8	5.0	10.3	10.4	10.4
Flour	do	3.6	7.1	6.6	6.5	3.2	5.9	5.2	5.2	3.8	7.2	6.8	6.8
Corn meal	do	2.4	4.0	3.9	3.8	2.4	4.0	4.0	3.9	2.1	4.3	4.1	4.0
Rolled oats	do	-----	9.5	9.6	9.6	-----	8.5	8.1	8.1	-----	10.1	10.2	10.0
Corn flakes	8-oz. pkg.	-----	11.5	11.9	11.8	-----	10.2	10.0	10.0	-----	12.3	12.4	12.4
Wheat cereal	28-oz. pkg.	-----	26.5	26.4	26.4	-----	24.3	24.2	24.5	-----	26.5	27.0	27.1
Macaroni	Pound	-----	22.0	21.9	21.7	-----	19.4	18.8	19.0	-----	19.0	18.9	18.9
Rice	do	8.6	11.5	10.5	10.5	9.0	10.6	9.8	9.6	8.2	12.3	11.1	10.7
Beans, navy	do	-----	11.2	10.2	10.4	-----	8.6	8.1	8.2	-----	11.4	10.8	10.7
Potatoes	do	2.0	6.7	4.8	4.8	1.7	6.1	4.3	3.9	1.9	6.7	5.2	5.0
Onions	do	-----	7.8	7.8	8.0	-----	5.6	5.4	5.3	-----	7.6	7.3	7.4
Cabbage	do	-----	8.8	5.8	5.5	-----	7.1	5.2	5.5	-----	7.8	6.0	5.9
Beans, baked	No. 2 can	-----	12.2	12.0	11.5	-----	10.8	10.6	10.5	-----	12.7	11.6	12.0
Corn, canned	do	-----	17.7	17.5	18.1	-----	15.8	14.6	14.9	-----	18.1	18.1	18.0
Peas, canned	do	-----	19.5	19.7	19.7	-----	16.0	14.8	14.8	-----	21.7	20.5	20.5
Tomatoes, canned	do	-----	11.7	11.3	11.4	-----	10.6	10.9	10.9	-----	11.6	11.4	11.5
Sugar, granulated	Pound	6.0	7.2	8.0	7.9	5.0	6.0	6.6	6.7	5.3	7.3	7.9	7.9
Tea	do	60.0	103.5	105.9	105.9	56.0	73.2	73.0	73.5	61.3	92.9	96.4	96.2
Coffee	do	32.0	51.8	51.5	51.5	25.2	47.4	46.2	45.7	28.8	54.0	53.8	53.1
Prunes	do	-----	18.1	17.5	17.5	-----	14.8	13.7	12.9	-----	19.3	18.3	18.4
Raisins	do	-----	15.8	16.4	16.4	-----	13.4	12.9	13.0	-----	15.4	15.3	15.1
Bananas	Dozen	-----	29.1	27.3	29.1	-----	25.0	26.4	27.3	-----	39.5	37.7	37.5
Oranges	do	-----	36.8	35.8	35.8	-----	45.3	41.6	42.9	-----	43.3	41.1	41.5

[1] The steak for which prices are here quoted is called "sirloin" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.

Cities on Specified Dates

for February 15, 1913 and 1926, and for January 15 and February dates with the exception of February, 1913, as these cities were not

ARTICLES OF FOOD IN 51 CITIES ON SPECIFIED DATES

particularly meats and vegetables, owing to differences in trade practices]

Boston, Mass.				Bridgeport, Conn.			Buffalo, N. Y.				Butte, Mont.			Charleston, S. C.			
Feb. 15—		Jan. 15, 1927	Feb. 15, 1927	Feb. 15, 1926	Jan. 15, 1927	Feb. 15, 1927	Feb. 15—		Jan. 15, 1927	Feb. 15, 1927	Feb. 15, 1926	Jan. 15, 1927	Feb. 15, 1927	Feb. 15—		Jan. 15, 1927	Feb. 15, 1927
1913	1926						1913	1926						1913	1926		
Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
[1] 34.5	[1] 64.1	[1] 64.4	[1] 64.7	48.5	49.2	48.9	20.3	39.7	40.4	40.5	30.0	29.8	31.9	21.0	33.0	32.3	32.7
32.4	50.1	50.0	50.1	41.1	42.1	41.4	18.3	33.5	34.0	34.4	25.5	27.3	27.8	20.0	30.5	30.0	30.0
23.4	38.9	37.9	38.0	37.1	36.4	36.6	17.0	29.6	31.0	30.7	26.4	26.0	27.6	19.3	27.5	26.0	26.1
17.0	26.2	28.9	28.6	27.1	27.1	27.1	14.7	22.5	24.1	23.9	18.2	19.3	18.9	15.0	20.7	20.1	20.4
-----	20.3	18.5	19.0	11.9	11.7	11.8	10.7	14.3	14.2	14.4	12.3	12.5	12.9	11.4	15.2	14.5	14.7
20.6	37.6	38.4	37.6	37.9	37.7	37.3	19.3	38.4	38.5	37.2	34.8	36.3	35.6	23.0	34.3	35.6	34.7
24.6	46.5	48.9	47.9	52.1	53.9	53.5	20.3	44.4	45.6	45.1	56.4	56.3	55.8	23.0	43.7	44.0	42.9
28.3	57.1	62.8	61.1	57.0	60.7	60.2	24.0	52.2	56.3	54.4	58.3	60.5	60.9	26.7	48.8	52.9	52.1
21.8	39.9	38.6	38.3	39.0	37.1	37.6	17.5	35.9	33.1	33.0	36.7	36.0	36.0	21.3	42.5	40.6	40.7
22.8	42.3	41.0	41.1	41.9	40.6	41.7	20.0	41.0	40.6	40.2	37.0	34.4	36.8	21.4	38.0	38.2	37.8
-----	37.2	32.8	32.7	34.0	34.5	32.8	-----	38.2	32.6	32.1	30.6	30.7	30.8	-----	38.5	29.6	29.6
8.9	14.9	14.3	14.3	16.0	16.0	16.0	8.0	13.2	13.0	13.0	14.3	14.0	14.0	11.7	18.0	19.0	19.0
-----	12.3	12.2	12.3	11.6	11.5	11.5	-----	11.4	11.3	11.3	11.3	11.0	10.9	-----	11.8	11.9	11.9
38.9	56.4	59.2	60.3	55.6	59.0	60.0	41.2	55.0	59.3	59.8	52.2	54.6	55.5	39.8	55.2	58.4	58.5
-----	30.9	29.7	29.6	30.1	29.6	29.4	-----	30.2	29.7	29.7	-----	-----	-----	-----	32.1	30.8	31.5
22.9	39.7	38.5	38.1	40.1	39.3	40.1	21.5	38.4	38.0	37.9	36.6	35.7	36.4	21.0	35.4	36.1	36.4
15.3	22.5	20.8	20.3	21.6	18.7	18.7	13.9	21.0	18.8	18.1	25.3	23.6	23.2	14.8	23.3	21.6	21.0
-----	25.2	24.4	24.5	25.5	25.8	25.7	-----	26.3	25.8	26.5	29.2	28.3	29.5	-----	24.5	22.8	22.8
37.5	60.0	70.5	62.5	58.4	75.0	57.3	31.0	48.6	59.4	48.7	51.4	58.0	51.5	32.5	46.2	53.4	42.2
25.2	39.3	51.7	44.8	40.6	51.2	36.0	22.2	32.0	43.6	37.2	29.4	43.3	-----	23.8	35.3	44.0	36.0
5.9	9.1	9.0	8.9	9.0	8.8	8.8	5.6	9.0	8.9	8.7	9.8	9.8	9.8	6.2	10.8	11.2	11.0
3.7	7.0	6.1	6.1	6.2	5.7	5.6	2.9	5.8	5.1	5.0	6.0	5.6	5.4	3.7	7.4	7.0	6.9
3.5	6.5	6.4	6.2	7.8	7.9	7.7	2.5	5.4	5.1	5.0	5.9	5.9	5.9	2.3	4.0	3.8	3.9
-----	9.4	9.	9.2	8.5	8.5	8.5	-----	8.7	8.7	8.9	7.3	7.5	7.4	-----	9.4	9.5	9.6
-----	10.9	10.9	10.9	10.5	10.4	10.4	-----	10.4	10.2	10.2	12.4	12.1	12.2	-----	11.7	12.0	12.0
-----	25.1	25.4	25.3	24.6	24.7	24.7	-----	24.6	24.7	24.7	29.0	28.5	28.5	-----	26.6	26.5	26.3
-----	23.1	23.0	23.0	22.7	22.7	22.7	-----	22.0	21.4	21.4	19.5	20.0	20.4	-----	19.0	18.4	18.6
9.2	12.5	12.3	12.3	11.7	11.1	11.1	9.3	11.6	10.7	10.4	12.2	11.6	11.2	5.5	9.6	7.9	7.7
-----	10.6	9.9	9.9	10.3	9.7	9.7	-----	9.9	8.8	8.8	10.6	10.2	10.2	-----	10.3	10.0	10.0
1.7	5.9	4.0	3.7	5.9	3.8	3.5	1.4	5.7	4.0	3.5	3.9	3.1	3.0	2.0	6.7	4.5	4.3
-----	6.1	6.0	6.0	6.0	5.3	5.3	-----	7.4	6.1	6.5	4.8	5.1	7.0	-----	7.2	6.1	6.5
-----	7.4	5.3	6.2	7.1	5.4	6.2	-----	5.0	3.7	4.1	5.8	5.5	6.8	-----	7.2	4.3	4.6
-----	13.7	13.1	13.1	11.4	11.3	11.1	-----	10.6	9.9	9.9	14.9	14.5	14.0	-----	10.2	9.8	9.8
-----	19.3	19.6	19.3	20.0	19.6	19.8	-----	15.8	16.0	16.3	16.2	15.2	15.3	-----	15.6	15.0	14.5
-----	21.3	20.6	20.7	21.5	21.2	21.0	-----	16.0	16.4	16.4	15.5	15.2	15.0	-----	17.6	16.8	17.2
-----	13.0	12.7	12.7	13.2	12.7	12.9	-----	13.7	13.5	13.6	13.7	13.7	13.3	-----	10.3	10.5	10.5
5.4	6.6	7.5	7.5	6.3	7.1	7.2	5.3	6.5	7.3	7.3	7.6	8.8	8.7	5.0	6.5	7.1	7.1
58.6	75.6	76.6	75.1	60.6	60.6	60.6	45.0	69.8	69.8	70.3	82.7	81.4	80.9	50.0	75.3	76.9	76.9
33.0	55.8	55.9	55.1	49.1	48.4	48.1	29.3	49.8	48.1	48.3	56.8	56.5	56.1	26.0	46.1	46.9	47.1
-----	16.8	15.8	15.5	16.3	15.9	15.6	-----	16.5	15.8	15.3	16.9	17.6	16.0	-----	16.3	14.5	14.6
-----	13.9	13.6	13.5	14.1	14.0	14.3	-----	14.1	13.6	13.6	15.0	15.0	15.0	-----	14.3	14.1	14.3
-----	46.3	48.9	49.4	36.7	35.7	35.0	-----	43.3	43.2	42.8	[2] 15.2	[2] 14.8	[2] 15.6	-----	36.9	27.9	29.3
-----	50.0	52.2	49.4	51.9	55.1	52.1	-----	52.0	55.0	54.2	47.9	44.5	48.5	-----	33.9	30.0	29.8

[2] Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article	Unit	Chicago, Ill.				Cincinnati, Ohio				Cleveland, Ohio			
		Feb. 15—		Jan. 15, 1927	Feb. 15, 1927	Feb. 15—		Jan. 15, 1927	Feb. 15, 1927	Feb. 15—		Jan. 15, 1927	Feb. 15, 1927
		1913	1926			1913	1926			1913	1926		
		Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
Sirloin steak	Pound	20.9	44.1	45.1	44.7	21.3	37.0	36.5	36.5	22.3	36.8	38.2	38.6
Round steak	do	18.6	34.9	36.4	36.0	19.1	33.1	33.2	33.4	18.8	31.0	32.4	32.7
Rib roast	do	18.1	34.4	35.9	34.9	18.6	30.3	30.6	30.8	18.0	27.3	27.7	28.0
Chuck roast	do	13.9	25.2	26.0	25.3	13.9	20.8	22.4	22.4	14.7	22.0	22.9	23.2
Plate beef	do	11.0	14.5	15.2	15.2	11.6	15.0	16.1	15.7	10.6	13.8	14.0	13.7
Pork chops	do	16.3	33.4	35.4	34.8	19.2	33.7	33.7	33.2	18.3	35.8	35.8	35.3
Bacon, sliced	do	29.0	52.5	53.1	52.3	24.0	43.9	43.3	42.5	24.3	49.8	49.3	48.6
Ham, sliced	do	29.5	53.3	58.6	58.2	26.0	53.2	57.9	56.7	32.0	56.8	57.8	57.8
Lamb, leg of	do	19.1	38.0	37.7	37.1	16.6	36.8	35.0	35.1	18.7	37.1	35.3	35.0
Hens	do	19.4	40.0	38.6	38.8	22.6	38.9	38.2	39.8	20.6	42.4	39.7	39.9
Salmon, canned, red	do	-----	37.8	37.0	36.6	-----	36.9	31.2	31.2	-----	38.4	33.3	33.1
Milk, fresh	Quart	8.0	14.0	14.0	14.0	8.0	12.0	13.3	13.3	8.8	14.7	14.3	14.3
Milk, evaporated	15–16 oz. can	-----	10.9	11.2	11.3	-----	10.9	10.8	10.9	-----	11.2	11.3	11.3
Butter	Pound	39.9	50.8	57.8	58.2	42.3	52.8	58.3	63.7	43.6	54.9	60.6	62.2
Oleomargarine (all butter substitutes).	do	-----	28.7	27.5	27.1	-----	31.6	28.2	28.2	-----	32.6	30.3	29.8
Cheese	do	25.0	41.6	42.3	42.2	21.6	36.4	37.4	37.4	23.0	38.8	38.2	38.1
Lard	do	14.7	21.7	20.1	19.6	13.7	20.2	17.7	17.1	15.8	22.6	21.4	20.7
Vegetable lard substitute	do	-----	26.5	26.7	26.7	-----	25.9	25.7	25.6	-----	27.2	27.2	26.9
Eggs, strictly fresh	Dozen	27.3	43.7	58.3	48.4	27.6	39.3	53.1	37.8	31.8	45.7	59.1	45.4
Eggs, storage	do	22.6	38.0	47.3	34.0	19.0	30.0	41.8	-----	-----	33.4	47.6	35.0
Bread	Pound	6.1	9.8	9.9	9.9	4.8	9.2	9.0	9.0	5.5	8.1	7.9	7.9
Flour	do	2.8	5.9	5.3	5.3	3.4	6.3	5.9	5.8	3.2	6.2	5.5	5.5
Corn meal	do	2.9	6.2	6.7	6.8	2.5	4.2	4.1	4.0	2.8	5.3	5.4	5.3
Rolled oats	do	-----	8.4	8.6	8.7	-----	8.7	8.6	8.6	-----	9.4	9.4	9.5
Corn flakes	8-oz. pkg.	-----	10.1	10.1	10.0	-----	10.3	10.4	10.4	-----	11.2	11.2	11.3
Wheat cereal	28-oz. pkg.	-----	24.3	25.6	25.6	-----	24.4	24.4	24.4	-----	25.4	25.3	25.2
Macaroni	Pound	-----	19.4	19.6	19.4	-----	18.3	18.4	18.3	-----	22.0	21.9	21.8
Rice	do	9.0	11.8	11.6	11.4	8.8	11.0	10.5	10.1	8.5	11.9	11.6	11.5
Beans, navy	do	-----	9.5	9.6	9.5	-----	8.3	8.0	7.8	-----	8.2	8.4	8.4
Potatoes	do	1.2	5.5	3.9	3.7	1.4	5.9	4.2	3.9	1.4	5.6	4.4	4.2
Onions	do	-----	5.7	5.7	6.0	-----	5.8	4.9	5.2	-----	5.3	5.1	5.4
Cabbage	do	-----	6.7	5.8	5.8	-----	6.3	4.1	4.4	-----	6.1	5.3	5.4
Beans, baked	No. 2 can	-----	12.8	12.7	12.8	-----	11.3	10.6	10.7	-----	13.0	12.6	13.0
Corn, canned	do	-----	17.0	17.2	16.9	-----	15.6	15.0	15.5	-----	17.8	17.3	17.1
Peas, canned	do	-----	17.5	17.5	17.3	-----	17.2	16.7	16.9	-----	18.0	18.5	18.5
Tomatoes, canned	do	-----	14.5	13.9	13.6	-----	12.6	12.1	12.0	-----	13.9	13.8	13.9
Sugar, granulated	Pound	5.0	6.5	7.2	7.2	5.2	6.8	7.6	7.5	5.5	6.9	7.8	7.8
Tea	do	53.3	73.9	73.8	73.9	60.0	77.3	77.5	77.5	50.0	79.0	79.6	82.2
Coffee	do	30.0	52.0	51.1	50.0	25.6	46.7	45.4	45.7	26.5	53.9	54.4	53.9
Prunes	do	-----	18.1	18.5	18.4	-----	17.6	16.2	16.2	-----	17.3	15.8	15.6
Raisins	do	-----	15.2	15.3	15.4	-----	14.8	14.5	14.6	-----	14.6	14.6	14.7
Bananas	Dozen	-----	43.3	39.3	38.4	-----	38.5	36.0	37.0	-----	[2] 9.9	[2] 10.7	[2] 10.6
Oranges	do	-----	50.4	53.6	52.2	-----	42.0	36.9	40.6	-----	48.4	49.5	49.3

[1] The steak for which prices are here quoted is called "rump" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.

CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

Columbus, Ohio			Dallas, Tex.				Denver, Colo.				Detroit, Mich.				Fall River, Mass.			
			Feb. 15—				Feb. 15—				Feb. 15—				Feb. 15—			
Feb. 15, 1926	Jan. 15, 1927	Feb. 15, 1927	1913	1926	Jan. 15, 1927	Feb. 15, 1927	1913	1926	Jan. 15, 1927	Feb. 15, 1927	1913	1926	Jan. 15, 1927	Feb. 15, 1927	1913	1926	Jan. 15, 1927	Feb. 15, 1927
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
37.3	39.4	39.0	19.6	33.8	35.6	36.0	22.5	32.6	32.5	33.0	22.8	40.5	41.1	40.9	[1]31.0	[1]60.1	[1]60.5	[1]60.5
32.8	34.6	34.1	18.3	31.0	32.8	32.7	18.4	28.4	29.2	29.7	18.2	32.8	33.8	34.3	24.0	45.4	45.4	45.8
29.4	30.5	30.7	17.6	26.7	28.3	28.8	15.9	23.4	24.0	24.1	18.2	29.8	30.0	31.0	22.6	31.4	31.0	31.0
23.2	24.7	24.7	15.4	21.2	22.8	23.0	14.5	18.2	18.9	19.3	14.5	22.8	22.7	23.0	17.0	22.5	22.9	22.8
15.0	15.7	15.7	11.8	15.2	16.9	17.4	9.1	11.6	11.4	11.5	10.3	14.0	14.7	14.4	-----	13.2	13.3	13.3
34.4	35.4	34.4	20.4	34.8	35.6	34.9	16.5	34.2	33.7	32.0	16.8	37.5	38.2	37.1	17.7	36.3	36.7	36.1
47.4	50.5	49.5	36.0	45.8	44.6	44.0	26.3	49.1	50.0	49.7	22.4	50.6	51.0	50.5	24.8	45.1	45.3	44.6
54.1	58.5	56.9	28.8	55.9	58.3	58.9	27.0	53.6	57.4	56.6	24.0	58.3	61.0	60.9	28.7	53.2	56.7	55.6
42.6	41.3	41.2	20.5	44.3	44.2	44.2	15.5	35.5	35.2	35.4	16.7	41.3	38.0	37.8	19.0	42.1	41.2	40.5
39.3	38.7	38.7	18.7	32.4	33.5	32.6	20.0	32.6	32.1	32.2	20.0	41.9	39.6	40.3	24.8	42.6	43.2	43.2
39.4	35.4	35.5	-----	41.2	36.2	34.9	-----	38.3	33.5	33.5	-----	39.6	34.1	33.8	-----	37.8	36.2	35.2
12.0	12.0	12.0	10.0	15.0	13.0	13.0	8.4	12.0	12.0	12.0	8.8	14.0	14.2	14.0	9.0	14.0	14.0	14.0
11.5	11.5	11.5	-----	13.4	13.0	13.1	-----	11.2	10.4	10.5	-----	11.2	11.2	11.2	-----	12.6	12.5	12.5
51.1	57.1	57.8	39.0	54.5	57.0	56.1	40.0	49.2	53.5	53.4	40.4	54.4	59.2	60.1	38.4	55.0	56.4	56.9
31.3	28.8	28.7	-----	34.1	31.7	31.8	-----	28.5	25.2	25.0	-----	30.4	29.4	29.1	-----	30.4	30.0	30.0
38.2	37.4	37.3	20.0	37.5	37.6	37.7	26.1	38.6	37.7	37.9	21.3	37.5	39.1	38.8	23.6	39.0	38.8	39.3
19.3	17.8	16.9	16.0	26.4	23.6	21.8	16.3	22.9	20.4	20.0	15.9	22.7	19.7	19.2	14.8	21.4	18.6	18.4
25.9	26.0	26.0	-----	23.5	22.3	22.1	-----	23.2	22.8	22.2	-----	27.2	27.2	27.2	-----	27.6	26.9	26.6
37.8	54.0	38.9	26.3	35.0	47.1	34.7	29.0	37.3	52.4	36.9	31.2	45.6	58.4	48.3	37.7	60.5	73.8	60.3
28.0	42.5	30.0	-----	-----	39.0	-----	-----	30.6	41.9	30.0	24.8	29.2	43.4	34.3	25.0	37.9	50.7	38.5
8.1	8.0	8.0	5.6	8.5	9.5	9.5	5.3	8.3	8.1	8.1	5.6	8.7	8.4	8.5	6.2	9.2	9.2	9.2
6.4	5.4	5.4	3.3	6.0	5.5	5.5	2.7	5.4	4.4	4.3	3.2	6.1	5.4	5.4	3.3	6.5	5.9	5.8
3.8	3.7	3.7	2.6	4.6	4.2	4.3	2.5	4.3	4.4	4.3	2.7	5.8	5.9	5.7	3.4	7.1	6.5	6.7
9.3	9.4	9.4	-----	10.1	10.0	10.1	-----	8.8	7.9	7.8	-----	9.4	9.4	9.3	-----	9.8	9.5	9.5
10.8	10.9	10.8	-----	11.1	11.6	11.7	-----	11.8	10.9	10.9	-----	10.7	10.6	10.6	-----	11.6	11.3	11.3
24.6	25.8	25.8	-----	27.1	27.3	27.3	-----	25.8	25.0	24.8	-----	25.8	25.8	25.9	-----	25.8	25.3	25.3
22.4	20.4	20.4	-----	21.3	21.5	21.3	-----	18.9	19.8	20.0	-----	21.8	22.0	21.9	-----	24.6	24.5	24.5
13.0	12.6	12.6	9.3	13.2	11.9	12.4	8.6	11.9	10.5	10.3	8.4	12.2	12.3	12.2	10.0	11.9	11.8	11.8
8.6	8.2	8.1	-----	11.3	11.0	10.6	-----	10.0	9.7	9.4	-----	8.7	8.3	8.2	-----	10.5	9.9	9.9
5.9	3.9	3.5	2.0	6.1	5.1	5.2	1.1	4.8	3.8	3.5	1.3	5.2	3.3	2.9	1.8	6.2	3.9	3.8
6.3	5.4	5.2	-----	7.3	7.0	7.3	-----	4.9	3.9	4.3	-----	5.6	4.8	4.9	-----	6.2	5.3	5.5
6.8	4.4	4.7	-----	7.3	5.6	5.0	-----	4.6	3.7	3.9	-----	6.3	4.1	4.7	-----	7.9	5.9	6.4
12.6	12.5	12.0	-----	14.3	13.5	13.5	-----	13.2	11.1	11.3	-----	11.9	11.2	11.2	-----	12.3	12.0	12.3
15.5	14.2	14.4	-----	18.3	18.3	18.2	-----	15.4	14.3	13.9	-----	15.9	16.0	16.0	-----	17.1	16.5	16.3
15.4	15.5	15.5	-----	21.1	21.8	21.5	-----	16.1	15.5	15.2	-----	16.4	16.5	16.6	-----	18.6	18.6	18.3
13.6	13.2	12.5	-----	12.1	12.8	12.8	-----	13.9	12.7	12.3	-----	12.6	12.6	12.6	-----	12.5	13.2	13.2
7.0	7.9	7.8	5.9	7.5	8.1	8.1	5.4	7.0	8.0	7.8	5.1	7.0	7.5	7.5	5.3	6.9	7.5	7.4
88.4	89.3	89.3	66.7	106.1	106.2	105.9	52.8	67.5	68.5	69.0	43.3	73.3	74.0	74.0	44.2	60.3	61.2	61.2
49.5	51.1	50.6	36.7	59.7	60.3	60.3	29.4	52.2	51.2	50.7	29.3	52.1	51.1	50.4	33.0	53.4	52.0	51.8
17.7	17.4	17.3	-----	20.6	20.5	20.1	-----	18.8	16.4	16.1	-----	18.4	18.5	17.6	-----	15.7	15.4	15.2
15.6	14.6	14.6	-----	16.7	16.1	16.5	-----	14.4	14.5	14.4	-----	15.1	14.8	14.9	-----	14.3	14.1	14.0
37.8	37.5	38.8	-----	36.7	33.8	36.3	-----	[2]12.5	[2]9.4	[2]12.0	-----	35.0	36.3	35.6	-----	[2]10.4	[2]10.5	[2]10.5
49.9	50.8	52.1	-----	52.4	54.1	55.9	-----	44.8	45.3	47.9	-----	48.1	53.6	53.0	-----	46.6	46.5	48.4

[2] Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article	Unit	Houston, Tex.			Indianapolis, Ind.				Jacksonville, Fla.			
		Feb. 15, 1926	Jan. 15, 1927	Feb. 15, 1927	Feb. 15—		Jan. 15, 1927	Feb. 15, 1927	Feb. 15—		Jan. 15, 1927	Feb. 15, 1927
					1913	1926			1913	1926		
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak	Pound	32.9	35.2	35.1	23.5	37.3	37.7	37.7	25.8	36.7	35.8	35.8
Round steak	do	31.7	33.1	33.1	20.8	35.4	36.1	36.1	20.3	32.8	31.3	31.3
Rib roast	do	26.0	26.8	27.1	16.5	28.4	28.9	29.4	22.5	28.3	27.5	28.3
Chuck roast	do	19.8	21.0	21.3	14.6	24.2	24.7	24.7	14.3	20.3	20.4	20.0
Plate beef	do	17.8	18.7	17.8	11.2	15.2	15.8	15.8	10.3	12.1	12.8	12.5
Pork chops	do	33.6	36.1	36.2	18.0	34.4	33.7	32.8	23.0	35.6	35.2	35.4
Bacon, sliced	do	49.2	50.7	48.3	28.0	44.8	44.6	44.3	25.6	48.7	46.0	46.2
Ham, sliced	do	50.8	55.4	55.4	29.5	55.0	57.5	57.1	26.3	52.2	52.7	53.6
Lamb, leg of	do	36.0	35.0	33.6	17.7	40.0	39.2	39.2	19.5	41.0	37.2	37.2
Hens	do	38.8	35.9	35.0	21.0	40.5	40.0	37.2	22.0	39.6	39.6	39.0
Salmon, canned, red	do	35.4	31.1	31.8	----	35.6	33.6	33.1	----	38.4	34.3	34.0
Milk, fresh	Quart	17.3	15.8	15.8	8.0	12.0	12.0	12.0	12.5	22.0	22.3	22.3
Milk, evaporated	15–16 oz. can	11.5	11.4	11.4	----	10.8	10.8	10.7	----	12.6	11.7	11.8
Butter	Pound	54.6	57.0	56.7	41.8	52.6	59.4	59.5	43.8	57.8	58.9	60.5
Oleomargarine (all butter substitutes)	do	31.5	29.3	28.9	----	32.1	31.0	30.3	----	32.2	30.9	31.2
Cheese	do	34.4	34.6	34.2	21.0	37.9	38.4	38.4	22.5	35.2	36.2	36.3
Lard	do	24.3	20.5	20.5	15.0	19.5	17.5	17.5	15.3	23.7	22.6	22.0
Vegetable lard substitute	do	17.7	16.5	16.1	----	26.6	27.1	27.1	----	24.5	22.8	21.9
Eggs, strictly fresh	Dozen	30.7	43.3	31.8	29.0	40.2	50.5	39.5	32.5	49.6	56.1	41.4
Eggs, storage	do	28.5	35.0	30.0	24.0	----	42.5	----	----	32.0	41.7	----
Bread	Pound	9.0	8.8	8.8	5.1	8.1	8.1	8.1	6.5	11.0	10.9	11.1
Flour	do	6.1	5.4	5.4	3.2	5.9	5.6	5.5	3.7	6.9	6.6	6.6
Corn meal	do	4.1	4.1	4.0	2.6	4.3	4.2	4.2	2.8	4.2	4.2	4.2
Rolled oats	do	9.1	8.9	8.8	----	8.1	8.3	8.3	----	9.8	9.3	9.2
Corn flakes	8-oz. pkg	11.8	11.5	11.4	----	10.2	10.1	10.1	----	11.4	10.9	11.0
Wheat cereal	28-oz. pkg	25.8	25.8	25.4	----	24.8	25.1	24.8	----	24.7	24.4	24.3
Macaroni	Pound	18.3	18.1	18.3	----	18.5	19.2	19.2	----	20.3	19.6	19.4
Rice	do	9.6	8.9	9.2	9.2	11.9	11.4	11.4	6.6	11.3	9.5	9.4
Beans, navy	do	10.0	9.2	9.3	----	8.5	8.7	8.3	----	10.5	9.6	9.8
Potatoes	do	5.9	4.9	5.0	1.3	5.3	3.7	3.2	2.2	7.4	5.0	4.7
Onions	do	6.2	6.0	6.6	----	5.9	5.5	5.4	----	8.3	7.1	7.2
Cabbage	do	6.3	4.9	4.3	----	5.5	4.5	4.7	----	8.2	5.3	5.1
Beans, baked	No. 2 can	12.3	11.3	11.2	----	11.3	9.9	9.9	----	11.0	10.8	10.8
Corn, canned	do	15.5	14.1	14.1	----	15.0	14.1	14.1	----	19.2	17.5	17.5
Peas, canned	do	14.6	13.4	13.4	----	15.2	14.1	13.9	----	20.0	18.1	18.1
Tomatoes, canned	do	10.6	11.5	11.5	----	13.2	12.9	12.9	----	11.0	10.7	10.9
Sugar, granulated	Pound	6.9	7.3	7.3	5.9	7.0	7.9	7.8	6.1	7.0	7.8	7.9
Tea	do	81.6	83.1	84.4	60.0	85.8	87.9	87.9	60.0	96.7	98.2	98.6
Coffee	do	45.6	44.9	43.1	31.3	51.0	50.7	50.0	34.5	51.6	50.0	49.4
Prunes	do	16.7	16.0	16.0	----	19.7	19.2	19.0	----	18.4	16.4	15.4
Raisins	do	14.8	14.3	14.4	----	16.3	15.5	14.8	----	16.5	15.2	15.2
Bananas	Dozen	27.0	27.1	27.7	----	30.9	29.5	29.5	----	29.2	22.5	30.0
Oranges	do	41.6	44.4	46.4	----	45.1	45.6	46.2	----	39.1	25.8	30.0

[1] The steak for which prices are here quoted is called "sirloin" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.

CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

Kansas City, Mo.				Little Rock, Ark.				Los Angeles, Calif.				Louisville, Ky.				Manchester, N. H.			
Feb. 15—		Jan. 15, 1927	Feb. 15, 1927	Feb. 15—		Jan. 15, 1927	Feb. 15, 1927	Feb. 15—		Jan. 15, 1927	Feb. 15, 1927	Feb. 15—		Jan. 15, 1927	Feb. 15, 1927	Feb. 15—		Jan. 15, 1927	Feb. 15, 1927
1913	1926			1913	1926			1913	1926			1913	1926			1913	1926		
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
21.9	37.5	37.2	37.2	23.8	33.8	35.0	35.5	22.8	36.5	37.5	37.1	20.1	33.8	35.4	35.0	[1]34.0	[1]56.4	[1]55.2	[1]55.7
20.0	31.4	32.7	32.7	19.4	29.8	31.5	32.3	20.4	30.0	30.6	30.3	18.0	29.0	31.5	31.9	27.6	44.6	45.7	46.2
16.7	26.5	26.8	26.4	18.4	27.5	28.0	27.5	18.6	28.7	30.5	29.5	17.1	25.1	26.3	25.9	18.4	27.9	27.1	27.6
13.8	19.9	19.6	19.4	15.0	20.5	22.3	20.8	16.0	19.8	20.8	20.9	13.3	19.0	20.3	20.2	15.8	22.4	22.7	23.1
10.5	13.1	13.5	13.4	12.0	15.0	16.6	15.9	12.4	14.4	15.2	14.9	11.4	15.5	16.5	16.3	-----	15.5	16.0	16.3
17.3	34.2	33.0	32.6	19.0	34.2	33.9	33.3	24.4	44.0	45.2	43.5	17.4	33.2	32.8	32.0	18.2	34.5	35.9	34.4
28.4	49.3	47.0	47.5	34.0	48.9	50.0	51.2	33.8	57.0	57.4	56.4	26.6	46.9	48.8	48.6	22.2	42.6	41.3	41.7
27.5	54.3	55.9	55.8	28.8	50.7	55.4	55.0	35.0	65.7	69.5	70.0	26.1	47.9	53.1	52.7	27.2	44.0	45.9	45.6
16.3	33.5	34.5	33.8	18.8	39.3	40.0	40.8	19.2	37.0	36.8	35.8	17.6	38.6	39.7	38.3	17.8	37.7	37.6	37.3
16.1	34.4	35.1	34.2	17.6	30.7	31.5	31.6	28.3	43.5	44.6	44.6	21.5	38.0	38.4	38.3	23.0	42.7	44.6	44.0
----	38.6	35.9	35.4	----	38.5	33.4	33.5	----	34.8	32.1	31.0	----	37.1	32.6	31.5	-----	39.1	33.4	33.3
8.7	13.0	13.0	13.0	10.0	15.0	15.0	15.0	10.0	15.0	15.0	15.0	8.8	13.0	13.0	13.0	8.0	14.0	14.0	14.0
----	11.8	11.6	11.6	----	12.4	11.8	11.9	----	10.1	10.2	10.2	----	11.9	11.7	11.8	-----	13.0	12.9	12.9
41.5	52.8	56.4	57.2	45.0	55.1	58.3	58.4	43.5	55.2	56.6	56.5	43.2	54.8	60.9	61.2	41.8	56.8	59.1	60.9
----	27.9	26.9	27.1	----	31.1	28.8	28.8	----	33.1	30.6	30.5	----	33.4	26.9	26.9	-----	28.0	25.8	25.8
21.5	37.2	37.9	37.7	21.7	37.5	38.6	38.6	19.5	40.1	38.3	39.0	20.8	38.5	37.4	38.0	21.3	37.1	36.4	36.6
16.1	21.5	19.4	18.8	15.0	23.1	22.6	22.2	17.9	23.9	21.7	21.4	15.2	21.0	18.0	18.2	16.0	21.4	18.6	19.0
----	27.0	27.7	27.4	----	23.7	22.5	22.3	----	25.8	26.2	25.6	----	28.4	28.7	28.7	-----	25.9	25.8	26.0
25.4	35.8	50.0	39.7	25.0	34.3	50.6	37.6	26.0	34.8	46.9	34.6	25.0	38.9	51.8	36.6	34.6	54.9	65.1	56.7
17.0	25.0	39.8	35.0	----	25.0	41.3	30.0	----	-----	43.0	-----	20.1	-----	41.5	-----	25.0	36.9	49.3	41.6
5.9	10.0	9.6	9.6	6.0	9.4	9.6	9.3	6.2	8.6	8.5	8.5	5.7	9.3	9.3	9.3	5.9	8.7	8.7	8.7
3.0	6.3	5.3	5.3	3.6	6.8	6.4	6.3	3.6	5.8	5.4	5.4	3.6	7.2	6.0	6.0	3.4	6.6	5.8	5.7
2.6	5.2	4.8	4.7	2.4	4.1	3.9	3.9	3.4	5.4	5.4	5.2	2.2	3.9	3.7	3.7	3.6	5.2	5.2	5.0
----	9.3	9.2	9.2	----	10.4	10.8	10.8	----	9.8	10.1	10.0	----	8.5	8.4	8.4	-----	9.0	9.0	9.1
----	12.3	11.0	10.9	----	12.2	12.0	11.9	----	10.1	10.1	10.1	----	10.7	10.6	10.7	-----	11.1	11.1	11.2
----	26.9	26.3	26.3	----	24.8	26.0	25.8	----	24.7	25.0	25.1	----	24.0	25.8	25.8	-----	25.1	25.5	25.8
----	20.4	20.1	19.9	----	20.5	21.7	21.3	----	17.5	18.2	18.3	----	19.5	18.3	18.1	-----	24.5	23.8	23.9
8.7	10.7	9.8	9.5	8.3	10.3	9.3	8.9	7.7	11.3	10.6	10.3	8.1	11.4	11.5	11.4	8.5	10.9	10.0	10.1
----	9.4	9.1	9.2	----	9.8	9.5	9.5	----	9.5	9.2	9.2	----	8.3	8.0	7.9	-----	9.4	9.1	9.0
1.4	5.5	3.9	3.8	1.7	5.9	4.7	4.6	1.0	5.6	4.4	4.4	1.5	5.8	3.8	3.5	1.4	5.7	3.6	3.4
----	6.6	6.2	6.5	----	6.9	6.2	6.2	----	6.4	5.5	5.7	----	5.7	5.2	5.2	-----	5.2	5.1	5.5
----	6.4	4.3	4.4	----	6.9	5.1	4.6	----	5.3	4.2	4.4	----	7.2	4.7	5.8	-----	5.5	4.2	4.1
----	13.3	12.5	12.5	----	11.4	11.0	10.8	----	11.7	11.5	11.4	----	11.1	10.0	10.2	-----	14.1	13.5	13.8
----	15.0	14.5	14.1	----	16.8	17.6	17.5	----	16.0	16.0	16.1	----	16.9	15.1	15.7	-----	17.6	16.9	16.7
----	15.8	15.1	15.2	----	18.2	18.8	18.8	----	17.4	17.2	17.3	----	16.1	15.3	14.6	-----	19.3	18.5	18.9
----	11.9	11.7	11.8	----	11.4	11.7	11.3	----	[2]15.6	[2]15.6	[2]15.3	----	10.5	10.7	10.8	-----	13.0	12.6	12.6
5.6	7.1	7.8	7.9	5.5	7.5	8.3	7.9	5.4	6.6	7.4	7.2	5.2	7.1	7.9	7.8	5.4	6.8	7.8	7.7
54.0	81.3	89.4	89.3	50.0	102.9	106.1	105.7	54.5	74.4	74.5	74.9	60.0	81.3	90.3	90.3	45.0	63.7	62.9	63.5
27.8	53.5	52.8	52.0	30.8	56.2	53.5	53.6	36.3	54.7	53.3	52.6	27.5	50.7	48.2	49.3	32.0	52.5	52.3	51.8
----	17.3	17.0	16.9	----	18.3	17.5	17.0	----	16.8	15.0	14.8	----	16.9	16.4	16.0	-----	15.7	15.2	14.7
----	15.3	14.8	14.6	----	15.7	15.4	15.4	----	12.7	12.8	12.9	----	15.5	14.7	14.5	-----	14.4	14.0	14.0
----	[3]11.5	[3]10.9	[3]10.5	----	[3]9.3	[3]8.6	[3]8.6	----	[3]9.6	[3]9.3	[3]10.9	----	[3]10.6	[3]10.7	[3]10.7	-----	[3]9.5	[3]9.8	[3]9.8
----	48.0	49.6	49.5	----	44.7	48.0	48.9	----	43.9	47.3	46.8	----	43.1	36.8	37.1	-----	44.4	49.4	45.4

[2] No. 2½ can.

[3] Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article	Unit	Memphis, Tenn.				Milwaukee, Wis.				Minneapolis, Minn.			
		Feb. 15—		Jan. 15, 1927	Feb. 15, 1927	Feb. 15—		Jan. 15, 1927	Feb. 15, 1927	Feb. 15—		Jan. 15, 1927	Feb. 15, 1927
		1913	1926			1913	1926			1913	1926		
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak	Pound	20.0	35.3	36.0	35.5	20.5	36.9	37.6	37.4	20.0	31.2	31.9	31.1
Round steak	do	16.8	32.1	33.8	33.3	18.5	33.0	33.6	33.4	18.0	28.1	28.9	29.0
Rib roast	do	18.2	26.4	25.3	25.5	17.3	28.3	28.4	28.2	17.7	25.1	26.6	25.9
Chuck roast	do	13.9	18.7	19.4	19.2	15.0	23.5	24.8	24.3	14.5	18.8	20.6	20.3
Plate beef	do	10.2	14.6	16.5	15.8	10.8	14.2	14.7	14.7	8.7	11.6	12.8	12.6
Pork chops	do	18.6	30.8	32.8	29.5	15.3	33.5	33.7	32.8	16.8	33.1	33.1	33.0
Bacon, sliced	do	29.1	43.0	41.5	41.3	26.3	47.1	48.6	48.0	25.0	48.8	47.4	47.4
Ham, sliced	do	26.4	50.8	54.0	54.5	26.8	49.0	52.8	51.8	27.5	50.7	52.9	53.2
Lamb, leg of	do	20.4	38.6	38.0	37.0	19.5	39.4	37.7	37.9	15.0	34.9	34.4	34.1
Hens	do	19.6	33.9	32.1	32.8	18.8	37.1	35.4	35.7	19.0	35.3	35.1	35.4
Salmon, canned, red	do	.....	33.1	35.0	33.3	.....	32.1	34.0	33.4	.....	39.0	38.7	38.9
Milk, fresh	Quart	10.0	15.0	15.0	15.0	7.0	10.0	11.0	11.0	7.0	11.0	11.0	11.0
Milk, evaporated	15-16 oz. can	.....	11.5	11.2	11.0	.....	11.3	11.1	11.0	.....	12.1	11.5	11.6
Butter	Pound	42.1	53.6	56.9	57.1	40.2	50.0	56.1	57.5	39.1	49.1	54.6	55.9
Oleomargarine (all butter substitutes)	do	.....	27.7	27.9	27.8	.....	29.2	27.1	26.7	.....	29.2	25.5	25.3
Cheese	do	20.0	33.9	36.0	35.2	22.7	34.7	36.0	36.1	20.8	34.9	36.1	36.0
Lard	do	15.2	19.4	17.0	16.5	15.1	22.1	19.7	19.1	15.2	20.9	18.4	18.0
Vegetable lard substitute	do	.....	23.7	19.7	19.6	.....	26.6	26.8	26.7	.....	27.4	27.1	27.1
Eggs, strictly fresh	Dozen	29.3	37.8	48.5	37.7	29.0	37.5	51.8	40.2	28.1	37.5	50.3	40.0
Eggs, storage	do	20.0	.....	39.5	.....	22.0	28.3	42.2	34.3	21.7	24.0	40.0	.....
Bread	Pound	6.0	9.7	9.5	9.5	5.6	9.0	9.0	9.0	5.7	9.9	8.9	9.1
Flour	do	3.6	7.1	6.1	6.0	3.1	5.8	5.1	5.2	2.9	5.8	5.3	5.2
Corn meal	do	2.1	3.8	3.4	3.6	3.3	5.6	5.5	5.5	2.4	5.5	5.2	5.4
Rolled oats	do	.....	9.5	9.1	9.0	.....	8.6	8.4	8.4	.....	8.7	8.3	8.2
Corn flakes	8-oz. pkg	.....	11.1	10.8	10.8	.....	10.4	10.3	10.3	.....	10.8	10.8	10.7
Wheat cereal	28-oz. pkg	.....	25.9	25.2	25.2	.....	24.5	24.5	24.4	.....	25.8	25.3	25.5
Macaroni	Pound	.....	19.5	19.3	19.7	.....	18.2	17.3	17.3	.....	19.3	19.1	18.8
Rice	do	7.5	10.4	9.2	9.0	9.0	11.9	10.8	10.6	8.6	11.9	10.7	10.9
Beans, navy	do	.....	9.6	9.0	9.3	.....	8.7	8.5	8.4	.....	9.3	9.6	9.5
Potatoes	do	1.6	6.0	4.6	4.3	1.2	4.8	3.5	3.1	1.0	5.0	3.3	3.2
Onions	do	.....	5.0	5.3	5.3	.....	5.0	5.0	5.1	.....	5.7	5.4	5.6
Cabbage	do	.....	6.5	4.7	3.8	.....	6.1	5.1	4.9	.....	5.7	4.0	4.2
Beans, baked	No. 2 can	.....	11.9	11.5	11.4	.....	11.4	11.2	11.0	.....	13.2	12.2	12.4
Corn, canned	do	.....	16.6	15.5	15.0	.....	16.2	15.6	15.3	.....	15.9	14.2	14.2
Peas, canned	do	.....	18.1	16.0	15.7	.....	16.8	15.8	15.7	.....	16.1	14.4	14.3
Tomatoes, canned	do	.....	11.3	10.2	10.0	.....	14.1	13.6	13.5	.....	14.5	13.8	13.6
Sugar, granulated	Pound	5.5	7.0	7.3	7.2	5.4	6.3	7.2	7.2	5.6	6.9	7.5	7.6
Tea	do	63.8	94.4	99.5	99.4	50.0	71.4	71.6	71.1	45.0	61.8	61.7	61.4
Coffee	do	27.5	51.3	49.5	48.8	27.5	47.0	45.9	45.0	30.8	54.3	53.8	53.3
Prunes	do	.....	18.0	15.5	15.4	.....	17.3	15.7	15.6	.....	16.7	16.0	15.5
Raisins	do	.....	15.9	14.6	14.7	.....	14.8	14.7	14.8	.....	15.2	14.5	14.5
Bananas	Dozen	.....	34.0	8.1	8.7	.....	[2] 9.8	[2] 9.9	[2] 9.8	.....	[1] 11.5	[2] 11.9	[2] 12.0
Oranges	do	.....	45.1	33.4	35.3	.....	46.3	46.0	46.9	.....	49.5	50.3	48.0

[1] Whole.

CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

Mobile, Ala.			Newark, N. J.				New Haven, Conn.				New Orleans, La.				New York, N. Y.			
Feb. 15, 1926	Jan. 15, 1927	Feb. 15, 1927	Feb. 15—		Jan. 15, 1927	Feb. 15, 1927	Feb. 15—		Jan. 15, 1927	Feb. 15, 1927	Feb. 15—		Jan. 15, 1927	Feb. 15, 1927	Feb. 15—		Jan. 15, 1927	Feb. 15, 1927
			1913	1926			1913	1926			1913	1926			1913	1926		
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
34.2	34.5	34.5	25.2	43.2	43.9	44.8	30.0	53.6	53.7	54.3	19.5	34.9	34.9	36.0	24.7	44.8	44.3	44.0
33.3	33.6	33.6	24.8	40.7	42.3	42.5	26.2	43.9	44.0	43.8	17.5	30.4	31.2	31.2	23.1	42.6	42.7	42.4
27.5	28.6	28.6	19.6	35.5	34.2	34.9	23.0	35.2	35.6	35.6	18.8	29.3	30.0	30.2	21.1	38.5	38.6	38.6
23.3	23.9	23.6	16.8	24.5	24.4	24.1	17.6	26.9	26.3	26.5	13.8	21.2	20.7	20.8	15.1	24.6	24.6	24.8
17.7	17.8	17.7	11.6	13.4	12.8	12.8	-----	15.1	15.6	15.6	10.8	18.0	18.5	17.8	14.0	20.8	19.5	19.5
37.5	38.6	38.6	19.6	35.5	37.1	35.8	18.4	35.6	37.1	36.1	20.1	35.2	36.0	36.3	19.8	38.5	39.2	38.6
48.8	48.8	48.5	22.0	43.9	47.6	46.7	26.2	49.6	50.1	48.8	29.3	45.9	50.5	50.2	23.1	50.4	49.3	49.1
49.6	52.7	52.3	[1] 18.6	53.4	55.3	55.8	30.0	58.3	61.5	61.3	26.0	50.4	53.7	54.3	27.8	59.1	62.0	61.3
41.3	40.0	40.0	20.8	38.1	36.2	36.5	18.8	39.6	38.0	37.8	20.1	39.8	38.5	38.4	16.5	36.3	35.3	35.8
38.3	38.0	38.2	21.8	39.1	37.3	37.3	22.2	42.7	42.0	41.8	20.7	38.5	37.6	38.3	20.4	40.6	39.5	40.5
38.8	32.8	32.0	-----	36.3	31.9	31.0	-----	35.5	32.1	31.2	-----	38.1	37.6	38.7	-----	35.7	30.5	29.9
18.5	18.5	18.5	9.0	15.0	15.0	15.0	9.0	16.0	16.0	16.0	10.0	14.0	14.0	14.0	9.0	15.0	15.0	15.0
11.7	11.8	11.6	-----	11.2	11.2	11.2	-----	12.1	12.1	12.1	-----	11.1	11.1	11.1	-----	11.2	11.1	11.0
58.8	59.9	61.5	44.0	54.6	60.1	60.8	38.7	56.0	57.7	57.5	41.8	55.2	59.0	59.1	41.5	54.4	58.8	60.4
31.0	29.1	29.2	-----	30.4	30.7	30.5	-----	33.5	31.1	30.8	-----	32.1	29.4	28.9	-----	30.9	30.2	29.8
36.7	37.8	38.5	24.5	40.0	39.7	39.5	22.0	39.0	39.1	39.8	22.0	35.6	37.5	38.0	20.0	38.8	38.1	38.0
22.0	19.2	19.6	15.7	22.8	20.1	19.8	14.7	22.3	19.4	19.3	14.7	21.7	19.8	19.9	15.7	23.2	20.5	20.3
21.5	20.4	20.3	-----	26.4	25.7	25.7	-----	25.9	25.7	25.7	-----	22.1	19.0	19.1	-----	26.0	26.2	26.3
39.7	50.3	32.2	43.0	54.4	63.9	54.5	38.0	62.2	75.1	60.6	29.1	38.0	51.1	39.4	38.0	53.8	64.7	53.9
32.5	42.6	35.0	25.3	35.7	48.2	39.4	24.8	37.0	50.7	43.6	23.0	28.4	40.8	31.3	26.0	42.0	47.4	42.1
9.6	10.1	10.1	5.6	9.3	9.6	9.5	6.0	9.1	9.2	9.2	5.1	8.9	8.8	8.9	6.0	9.6	9.6	9.7
6.8	6.4	6.3	3.5	6.1	5.4	5.4	3.2	6.3	5.6	5.5	3.8	7.7	6.8	6.8	3.2	6.3	5.5	5.4
4.0	3.8	3.8	3.6	6.7	6.7	6.6	3.2	7.0	6.8	6.7	2.6	3.9	4.1	4.1	3.4	6.4	6.5	6.5
8.8	8.6	8.5	-----	8.3	8.2	8.3	-----	9.4	9.3	9.3	-----	8.9	9.0	9.0	-----	8.6	8.7	8.7
11.2	11.1	11.3	-----	10.1	10.0	10.0	-----	10.7	10.7	10.6	-----	10.4	10.4	10.3	-----	10.0	10.0	10.0
25.3	25.3	25.0	-----	24.2	24.5	24.2	-----	25.3	24.8	24.9	-----	24.6	24.5	24.6	-----	23.9	23.9	24.0
20.6	20.5	20.9	-----	21.1	20.9	20.9	-----	23.2	22.3	22.2	-----	9.4	10.5	10.4	-----	21.1	20.8	20.8
11.1	10.3	10.0	9.0	11.2	10.8	10.8	9.3	12.4	11.1	10.9	7.4	10.4	9.8	9.7	8.0	10.8	10.1	10.1
9.5	9.1	8.9	-----	9.8	9.7	9.7	-----	9.8	9.6	9.5	-----	9.0	8.4	8.3	-----	10.8	9.9	9.9
6.3	4.9	4.8	2.5	6.0	4.4	4.2	1.7	6.0	4.0	3.8	1.9	6.1	4.7	4.6	2.5	6.5	4.3	4.2
5.8	5.5	5.4	-----	6.2	5.6	6.0	-----	6.7	6.0	6.1	-----	5.1	4.5	4.7	-----	5.9	5.5	5.5
5.9	5.3	4.3	-----	6.1	4.3	6.0	-----	6.6	4.9	5.6	-----	5.5	4.1	4.1	-----	6.2	5.0	5.3
11.0	10.7	10.7	-----	11.3	10.7	11.0	-----	11.6	11.4	11.2	-----	11.3	11.0	11.0	-----	11.4	10.5	10.6
17.0	18.1	17.6	-----	16.8	16.2	16.1	-----	18.6	18.6	18.7	-----	14.7	15.6	15.6	-----	15.3	14.7	14.4
16.7	16.3	16.3	-----	16.6	16.2	15.9	-----	19.8	19.3	19.3	-----	16.7	17.4	17.2	-----	15.5	14.8	14.9
11.2	10.9	11.0	-----	11.2	11.6	11.5	-----	12.0	12.6	12.4	-----	10.7	11.8	12.0	-----	10.9	11.4	11.3
6.8	7.5	7.3	5.3	6.1	6.7	6.9	5.2	6.5	7.4	7.4	5.3	6.1	7.1	7.1	4.9	6.0	6.8	6.8
80.0	78.9	78.9	53.8	63.7	63.2	62.8	55.0	59.3	60.0	59.6	62.1	82.4	80.4	79.6	43.3	64.9	65.9	65.5
50.9	50.0	49.9	29.3	50.2	48.8	48.3	33.8	53.4	52.3	51.3	26.4	36.4	35.6	35.4	27.5	48.3	46.7	46.2
16.5	15.8	15.3	-----	15.7	14.9	14.6	-----	16.3	15.9	15.9	-----	18.1	17.3	17.0	-----	16.2	13.9	13.8
14.8	14.5	14.4	-----	14.0	14.6	14.6	-----	14.2	13.9	14.0	-----	13.8	13.9	13.7	-----	14.6	14.3	14.1
24.0	23.9	22.8	-----	37.5	38.6	38.3	-----	34.4	35.0	34.4	-----	16.0	15.7	15.8	-----	39.2	37.7	39.3
41.5	36.8	38.6	-----	48.8	49.2	46.1	-----	51.2	50.7	50.0	-----	44.4	40.5	43.0	-----	57.0	49.8	50.6

[1] Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article	Unit	Norfolk, Va.			Omaha, Nebr.				Peoria, Ill.		
		Feb. 15, 1926	Jan. 15, 1927	Feb. 15, 1927	Feb. 15—		Jan. 15, 1927	Feb. 15, 1927	Feb. 15, 1926	Jan. 15, 1927	Feb. 15, 1927
					1913	1926					
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak	Pound	39.9	40.6	39.8	23.0	36.4	36.8	37.0	33.1	35.0	35.0
Round steak	do	33.5	34.5	33.8	19.2	33.1	34.0	33.8	31.8	34.1	33.5
Rib roast	do	31.2	31.6	31.2	16.7	26.1	26.3	26.4	23.9	25.5	25.0
Chuck roast	do	22.3	22.5	23.0	13.5	21.8	21.7	22.0	20.4	21.5	21.0
Plate beef	do	15.3	15.5	15.6	9.5	12.0	13.2	12.9	13.6	14.3	14.1
Pork chops	do	34.8	35.6	34.8	16.5	35.1	34.7	33.8	33.7	33.7	33.5
Bacon, sliced	do	44.2	46.8	45.1	25.5	52.4	51.2	51.0	50.0	50.4	50.4
Ham, sliced	do	47.2	49.8	48.0	27.0	54.7	57.8	58.2	53.6	56.8	56.8
Lamb, leg of	do	40.4	39.3	39.2	16.5	37.8	36.3	36.0	36.7	39.3	38.6
Hens	do	39.3	40.2	39.2	16.9	33.7	32.6	32.9	35.1	35.0	35.1
Salmon, canned, red	do	36.5	33.1	33.9	.....	38.3	35.1	35.1	38.7	35.2	35.1
Milk, fresh	Quart	17.5	17.5	17.5	8.2	11.4	11.3	11.3	11.7	13.0	13.0
Milk, evaporated	15–16 oz. can	11.4	11.2	11.2	.....	11.9	11.8	11.7	11.5	11.3	11.4
Butter	Pound	56.8	60.8	60.4	40.0	49.7	54.7	54.7	49.6	56.1	56.6
Oleomargarine (all butter substitutes)	do	28.5	27.7	28.1	.....	31.1	26.2	26.0	31.0	28.9	28.9
Cheese	do	34.1	35.4	35.0	22.9	37.5	37.0	36.4	36.2	37.6	38.0
Lard	do	21.5	19.0	18.6	16.4	24.5	22.8	22.1	22.5	20.0	20.0
Vegetable lard substitute	do	22.0	22.1	21.8	.....	27.7	26.7	26.6	27.1	27.1	27.1
Eggs, strictly fresh	Dozen	44.0	55.0	41.5	25.0	35.4	45.1	35.5	37.7	52.5	42.5
Eggs, storage	do	35.2	48.8	32.5	.....	32.0	38.8	.....	.....	42.4	.....
Bread	Pound	9.5	9.9	9.9	5.2	10.1	10.2	10.2	10.1	10.0	10.0
Flour	do	6.4	5.9	5.8	2.9	5.6	4.7	4.7	6.1	5.5	5.5
Corn meal	do	4.5	4.5	4.3	2.4	5.0	4.8	4.7	4.8	4.9	4.8
Rolled oats	do	8.5	9.0	9.0	.....	10.3	10.2	10.2	9.0	8.8	8.8
Corn flakes	8-oz. pkg	10.3	10.4	10.3	.....	12.5	12.4	12.7	12.0	11.8	11.6
Wheat cereal	28-oz. pkg	23.9	24.8	24.5	.....	28.0	28.0	28.0	25.4	26.3	26.4
Macaroni	Pound	19.3	19.1	19.3	.....	21.2	20.7	20.6	20.5	18.7	18.7
Rice	do	12.1	12.1	11.9	8.5	11.5	11.0	11.0	11.5	11.8	11.8
Beans, navy	do	8.8	8.8	8.3	.....	10.2	9.8	9.7	9.0	8.8	8.8
Potatoes	do	6.5	4.6	4.3	1.3	5.5	3.9	3.8	5.4	3.7	3.3
Onions	do	6.5	6.6	6.3	.....	5.9	5.9	6.3	6.4	5.7	6.4
Cabbage	do	5.8	4.6	5.0	.....	6.4	4.4	4.6	6.4	4.5	5.1
Beans, baked	No. 2 can	10.1	9.8	9.7	.....	14.6	12.8	13.1	11.9	11.3	11.3
Corn, canned	do	15.3	15.8	15.0	.....	16.1	15.8	16.3	15.9	16.0	16.2
Peas, canned	do	19.5	19.5	19.9	.....	16.8	15.5	15.4	17.8	17.5	17.5
Tomatoes, canned	do	10.6	9.9	10.1	.....	14.3	13.3	13.2	13.8	12.7	12.7
Sugar, granulated	Pound	6.3	7.2	7.0	5.7	6.9	7.8	7.9	7.4	8.5	8.4
Tea	do	89.5	94.0	93.2	56.0	78.2	80.3	80.3	64.8	72.1	72.1
Coffee	do	49.9	50.9	50.6	30.0	57.4	54.4	54.2	52.2	50.9	50.0
Prunes	do	16.6	15.4	15.1	.....	17.7	16.5	16.8	20.4	18.8	18.2
Raisins	do	14.2	14.6	14.5	.....	15.5	15.5	15.7	15.0	14.5	14.5
Bananas	Dozen	32.3	32.8	33.0	.....	[1] 11.8	[1] 12.0	[1] 11.8	[1] 10.2	[1] 11.3	[1] 11.4
Oranges	do	45.6	48.9	50.2	.....	43.3	47.7	48.4	44.6	51.7	53.4

[1] The steak for which prices are here quoted is called "sirloin" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.

CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

Philadelphia, Pa				Pittsburgh, Pa.				Portland, Me.			Portland, Oreg.				Providence, R. I.			
Feb. 15—		Jan. 15, 1927	Feb. 15, 1927	Feb. 15—		Jan. 15, 1927	Feb. 15, 1927	Feb. 15, 1926	Jan. 15, 1927	Feb. 15, 1927	Feb. 15—		Jan. 15, 1927	Feb. 15, 1927	Feb. 15—		Jan. 15, 1927	Feb. 15, 1927
1913	1926			1913	1926						1913	1926			1913	1926		
Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
[1] 28.3	[1] 55.1	[1] 55.0	[1] 54.4	24.8	45.8	45.5	46.2	[1] 60.5	[1] 58.6	[1] 58.6	22.4	28.9	29.4	[1] 29.5	[1] 38.2	[1] 71.5	[1] 70.2	70.6
23.4	40.6	41.5	40.9	21.4	37.1	38.1	37.8	45.5	45.1	46.2	19.5	26.1	26.3	27.0	28.2	50.0	49.2	49.3
21.4	36.6	36.5	36.2	20.6	33.5	33.2	34.0	29.5	29.3	29.7	18.7	25.1	25.0	25.2	23.0	38.4	37.2	37.7
16.5	24.7	26.0	26.1	15.6	24.3	25.0	25.4	20.7	20.8	21.0	15.8	17.9	18.8	18.9	17.4	28.5	27.9	28.4
11.3	12.6	12.8	12.8	11.0	12.9	13.3	12.9	16.3	17.7	17.5	12.4	13.5	13.9	14.2	-----	19.0	17.9	17.5
19.1	39.4	40.0	40.1	20.0	37.2	37.3	37.1	36.8	37.0	35.8	19.2	36.9	38.4	37.7	18.4	39.8	38.8	38.1
23.4	46.6	46.9	47.0	27.2	52.2	54.0	52.3	44.8	45.4	45.1	27.5	52.1	54.7	55.0	21.8	45.2	45.6	45.5
29.0	55.9	59.7	60.5	29.0	59.5	60.8	61.1	52.8	56.8	56.4	28.8	53.6	57.4	57.1	28.5	57.1	60.0	59.6
18.6	40.0	39.1	39.4	21.5	40.0	40.1	39.3	37.6	37.3	37.0	17.0	37.7	35.9	36.0	20.0	41.5	38.8	39.6
21.3	41.7	41.1	40.7	25.3	44.1	44.1	43.8	40.8	41.8	41.8	22.0	35.3	36.9	36.9	22.8	42.9	42.5	42.0
-----	37.7	29.6	29.3	-----	37.5	31.6	31.2	39.2	31.3	31.0	-----	37.2	34.8	35.3	-----	37.7	33.5	33.2
8.0	12.0	13.0	13.0	8.8	14.5	15.0	15.0	13.5	13.8	13.8	9.7	12.7	12.0	12.0	9.0	14.7	14.3	14.3
-----	11.6	11.6	11.6	-----	11.6	11.3	11.1	12.5	12.4	12.5	-----	10.4	10.8	10.6	-----	12.3	12.1	12.2
47.1	57.5	62.9	62.5	43.1	55.3	60.7	61.5	57.1	60.3	60.4	43.5	54.9	56.7	56.4	41.0	55.7	57.2	57.5
-----	32.6	30.8	30.7	-----	32.5	31.9	31.5	29.9	28.0	28.0	-----	31.1	30.2	30.2	-----	29.7	29.1	29.0
25.0	41.2	39.8	40.0	24.5	40.0	39.6	39.8	38.9	37.7	37.6	21.3	39.1	38.3	37.7	22.7	36.7	36.7	36.4
14.4	22.1	19.3	18.8	15.1	21.8	20.5	20.1	21.3	18.5	18.5	17.9	24.7	22.6	22.4	15.0	21.2	18.6	18.4
-----	25.6	25.6	25.7	-----	26.9	27.7	27.5	24.5	25.7	26.0	-----	27.3	28.8	28.7	-----	26.9	26.7	26.9
30.1	46.8	62.4	46.4	29.2	46.6	61.5	50.9	56.5	64.1	57.3	32.5	33.4	40.7	37.5	39.0	66.7	67.3	56.7
24.0	32.7	47.6	37.8	25.0	33.0	45.9	41.5	41.5	51.3	42.5	25.0	-----	-----	-----	25.4	35.3	48.9	39.0
4.8	9.4	9.5	9.5	5.4	9.3	9.2	9.1	10.0	10.1	10.0	5.6	9.4	9.5	9.3	6.0	9.2	9.2	9.2
3.2	6.2	5.4	5.4	3.1	6.0	5.3	5.2	6.3	5.5	5.4	2.9	5.5	5.2	5.1	3.4	6.8	5.9	5.9
2.8	4.8	4.9	4.8	2.7	5.8	5.9	5.9	5.1	5.1	5.2	3.5	5.6	5.3	5.6	2.9	4.9	5.0	4.9
-----	8.7	8.6	8.7	-----	9.3	9.3	9.2	7.5	7.9	8.0	-----	10.5	10.4	10.4	-----	9.3	9.1	9.1
-----	10.0	10.1	10.1	-----	10.6	10.5	10.5	11.6	11.6	11.6	-----	11.3	11.6	11.6	-----	10.8	10.9	10.8
-----	24.3	24.8	24.7	-----	25.4	25.3	25.3	26.1	25.9	25.9	-----	26.6	26.7	26.7	-----	24.8	25.2	25.3
-----	21.5	20.7	20.7	-----	22.6	23.6	23.6	25.5	24.7	24.5	-----	18.5	18.4	18.7	-----	23.4	23.3	23.3
9.8	12.2	11.5	11.6	9.2	12.3	12.2	12.3	12.7	12.8	12.6	8.6	11.5	10.3	10.4	9.3	11.6	11.9	11.6
-----	9.4	9.2	9.0	-----	8.9	8.8	8.7	9.8	9.3	9.2	-----	9.5	9.7	9.8	-----	9.9	9.7	9.3
2.1	6.5	4.6	4.4	1.6	5.9	4.0	3.7	5.6	3.6	3.4	0.7	3.8	2.4	2.7	1.7	5.7	3.7	3.5
-----	5.7	5.3	5.3	-----	6.7	5.7	5.8	5.6	5.3	5.5	-----	4.3	4.2	4.8	-----	5.6	5.3	5.1
-----	7.9	4.9	5.3	-----	6.9	5.3	6.0	5.0	3.4	3.5	-----	3.3	4.0	4.5	-----	6.3	4.4	5.1
-----	11.0	10.7	10.7	-----	12.8	12.4	12.4	15.2	15.3	15.0	-----	14.4	13.2	13.0	-----	11.7	11.4	11.6
-----	15.1	14.5	14.5	-----	17.5	16.1	15.9	17.0	16.0	15.5	-----	19.9	19.2	19.4	-----	17.9	17.7	17.8
-----	15.6	15.3	15.4	-----	18.1	17.3	16.9	18.4	18.4	18.4	-----	19.6	19.6	19.2	-----	19.6	19.0	18.5
-----	11.4	12.5	12.3	-----	12.0	12.3	12.9	12.4	12.6	12.6	-----	[2] 17.1	[2] 16.3	[2] 16.7	-----	13.7	13.2	13.6
4.9	6.1	6.9	6.9	5.8	6.8	7.7	7.7	6.7	7.6	7.5	6.2	6.9	7.5	7.5	5.1	6.5	7.3	7.3
54.0	71.0	69.4	69.6	58.0	83.9	85.1	84.5	61.2	61.4	62.1	55.0	76.6	77.6	77.6	48.3	61.6	60.4	60.9
25.0	45.5	44.8	44.0	30.0	51.4	50.7	50.5	54.1	52.4	51.9	35.0	52.6	53.1	52.9	30.0	54.3	53.7	52.6
-----	16.1	13.8	13.4	-----	18.4	17.2	16.8	16.0	15.0	14.8	-----	14.5	9.8	10.1	-----	16.7	14.7	14.9
-----	13.6	13.5	13.5	-----	14.8	14.3	14.4	13.3	13.5	13.9	-----	13.7	13.5	13.6	-----	14.2	14.3	14.1
-----	33.8	31.3	31.7	-----	37.4	39.7	38.8	[3] 10.2	[3] 10.9	[3] 11.0	-----	[3] 13.6	[3] 13.1	[3] 13.2	-----	32.9	32.5	32.5
-----	48.0	46.3	44.4	-----	46.1	48.8	47.9	46.6	54.2	50.3	-----	44.1	48.7	52.1	-----	51.3	53.1	52.4

[1] No. 2½ can.

[2] Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article	Unit	Richmond, Va.				Rochester, N.Y.			St. Louis, Mo.			
		Feb. 15—		Jan. 15, 1927	Feb. 15, 1927	Feb. 15, 1926	Jan. 15, 1927	Feb. 15, 1927	Feb. 15—		Jan. 15, 1927	Feb. 15, 1927
		1913	1926						1913	1926		
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak	Pound	21.8	39.1	39.9	39.6	39.8	40.5	40.8	22.8	36.2	36.4	36.7
Round steak	do	19.6	34.7	35.0	34.9	34.1	34.0	33.8	20.4	34.3	34.9	35.1
Rib roast	do	18.9	31.5	31.2	32.3	30.0	30.6	30.3	17.6	30.3	30.4	30.3
Chuck roast	do	14.3	22.7	23.2	23.5	24.9	24.7	24.4	14.2	20.5	21.8	21.6
Plate beef	do	11.4	16.3	16.5	16.3	13.6	14.2	14.1	10.2	14.4	15.9	15.4
Pork chops	do	18.4	36.3	36.8	36.1	39.2	39.2	37.8	17.1	32.2	32.5	30.9
Bacon, sliced	do	23.4	44.3	44.9	45.3	43.8	44.4	44.4	23.0	46.1	45.0	44.8
Ham, sliced	do	23.3	44.9	46.3	46.6	52.9	55.8	55.6	26.7	50.4	52.0	52.4
Lamb, leg of	do	18.7	46.4	44.2	44.2	39.2	37.2	36.9	17.8	37.6	36.8	37.3
Hens	do	20.0	39.9	38.7	37.3	43.9	41.7	41.8	17.4	36.6	35.5	36.4
Salmon, canned, red	do	----	37.0	34.2	33.9	37.9	32.6	30.6	----	39.4	34.8	34.8
Milk, fresh	Quart	10.0	14.0	14.0	14.0	12.5	12.5	12.5	8.0	13.0	13.0	13.0
Milk, evaporated	15-16 oz. can	----	12.9	12.4	12.4	11.6	11.5	11.5	----	10.5	10.4	10.4
Butter	Pound	43.4	60.4	63.6	62.5	54.9	58.4	58.4	40.4	55.4	60.6	60.9
Oleomargarine (all butter substitutes).	do	----	31.7	31.9	31.5	32.4	30.4	29.6	----	28.7	27.0	27.2
Cheese	do	22.3	36.8	36.9	36.6	37.8	37.6	36.9	20.8	35.6	37.4	37.5
Lard	do	15.0	21.9	19.2	18.9	21.3	18.6	18.8	13.2	17.9	16.1	15.4
Vegetable lard substitute	do	----	26.0	25.9	25.8	24.1	23.5	23.7	----	26.3	25.6	25.7
Eggs, strictly fresh	Dozen	26.8	40.7	52.7	40.1	47.8	59.5	48.0	24.4	37.2	50.2	39.4
Eggs, storage	do	20.0	35.0	42.0	29.3	29.5	45.0	34.7	20.0	27.0	40.0	----
Bread	Pound	5.4	9.5	9.4	9.4	8.9	9.0	9.0	5.5	9.9	9.8	9.8
Flour	do	3.3	6.4	5.7	5.7	6.1	5.5	5.5	3.0	6.0	5.2	5.3
Corn meal	do	2.0	5.0	4.7	4.6	6.4	5.5	5.2	2.1	4.5	4.2	4.2
Rolled oats	do	----	9.0	8.9	8.9	9.5	9.2	9.4	----	8.8	8.5	8.4
Corn flakes	8-oz. pkg	----	11.1	10.9	10.9	10.4	10.3	10.6	----	10.1	10.1	10.0
Wheat cereal	28-oz. pkg	----	25.5	25.6	24.9	25.7	24.9	24.4	----	24.4	24.4	24.6
Macaroni	Pound	----	20.7	20.2	20.2	23.1	19.6	19.6	----	21.4	21.1	21.2
Rice	do	9.8	13.0	12.1	12.1	11.5	11.1	10.7	8.6	10.7	10.3	10.3
Beans, navy	do	----	9.9	9.2	8.8	9.7	9.1	9.0	----	8.2	8.0	8.0
Potatoes	do	1.7	6.8	4.5	4.5	5.7	3.2	2.8	1.5	5.6	4.3	4.1
Onions	do	----	7.1	6.9	6.9	5.1	4.6	4.7	----	5.7	5.4	5.7
Cabbage	do	----	7.7	4.6	5.3	5.1	2.4	2.1	----	5.7	4.3	4.0
Beans, baked	No. 2 can	----	10.7	9.7	10.1	10.9	10.4	10.1	----	10.8	10.6	10.4
Corn, canned	do	----	15.4	15.5	15.0	16.9	15.5	15.5	----	16.1	15.7	15.7
Peas, canned	do	----	20.8	20.3	19.9	18.9	18.7	18.4	----	16.9	15.3	15.3
Tomatoes, canned	do	----	10.5	10.2	10.4	14.3	13.5	13.3	----	12.3	11.4	11.4
Sugar, granulated	Pound	5.3	6.6	7.4	7.4	6.2	7.0	7.0	5.1	6.8	7.6	7.5
Tea	do	56.0	89.8	90.9	92.6	67.4	68.7	68.2	55.0	74.8	74.4	74.4
Coffee	do	27.4	49.6	48.0	47.8	48.9	47.2	47.2	24.3	48.0	48.0	47.7
Prunes	do	----	18.3	16.3	16.4	18.2	16.1	16.5	----	18.9	18.3	18.6
Raisins	do	----	14.3	14.1	14.1	14.1	14.1	14.4	----	14.8	14.3	14.4
Bananas	Dozen	----	36.4	37.7	37.5	38.6	38.6	36.4	----	33.0	31.4	30.0
Oranges	do	----	42.7	42.2	41.3	50.8	44.7	46.1	----	46.3	48.8	47.5

[1] No. 2½ can.

CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

St. Paul, Minn.			Salt Lake City, Utah				San Francisco, Calif.				Savannah, Ga.			Scranton, Pa.			
Feb. 15, 1926	Jan. 15, 1927	Feb. 15, 1927	Feb. 15—		Jan. 15, 1927	Feb. 15, 1927	Feb. 15—		Jan. 15, 1927	Feb. 15, 1927	Feb. 15, 1926	Jan. 15, 1927	Feb. 15, 1927	Feb. 15—		Jan. 15, 1927	Feb. 15, 1927
			1913	1926			1913	1926						1913	1926		
Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
34.8	35.2	34.8	22.6	29.3	30.8	31.2	20.3	32.9	32.7	32.9	31.5	34.5	34.5	21.8	49.5	51.2	50.8
28.7	29.9	30.1	19.5	26.6	28.0	28.3	19.0	30.6	29.8	29.6	27.0	27.5	27.0	18.0	41.8	42.3	42.3
28.3	29.1	28.8	19.2	22.8	23.5	23.7	20.7	30.7	30.5	30.5	25.5	27.5	27.5	18.8	37.0	38.0	37.4
22.2	22.9	23.4	15.0	18.4	18.8	18.8	14.6	20.1	19.7	19.8	17.3	18.1	17.8	14.6	28.3	28.0	28.0
13.2	13.4	13.4	11.5	13.0	13.4	13.5	12.5	16.7	15.6	15.8	13.6	15.0	14.7	10.0	13.4	13.2	12.9
32.4	32.7	31.9	21.4	36.1	38.5	37.2	23.0	44.1	44.1	43.4	34.0	33.8	33.0	18.5	40.6	40.6	39.8
47.4	45.9	46.4	32.0	47.5	49.7	49.3	32.8	62.6	61.5	60.4	44.1	46.1	45.3	24.6	49.9	49.9	49.1
48.9	49.3	50.0	29.0	53.2	60.0	59.7	30.0	63.3	65.7	64.7	45.5	47.7	46.8	25.8	58.2	60.9	59.5
33.7	31.7	31.6	17.9	34.3	33.9	33.2	17.2	38.2	36.6	36.1	41.0	38.0	40.0	20.0	44.5	44.0	44.5
34.6	33.0	32.9	23.9	32.3	33.2	33.4	23.8	43.7	45.4	44.7	35.4	34.6	34.6	22.7	45.7	45.0	45.5
37.7	36.3	36.3	-----	34.9	35.1	35.5	-----	35.1	31.3	30.9	40.3	33.8	33.1	-----	36.3	33.3	33.6
11.0	11.0	11.0	8.9	11.3	10.8	10.3	10.0	14.0	14.0	14.0	17.3	17.3	17.3	8.8	12.0	12.0	12.0
12.1	11.7	11.7	-----	10.7	10.6	10.6	-----	10.2	10.1	10.1	11.4	11.1	11.1	-----	12.1	11.8	11.8
48.1	53.9	53.9	38.6	52.1	52.6	52.7	40.7	55.2	57.2	57.6	57.2	60.7	60.4	40.0	55.2	57.8	59.3
27.9	25.9	25.6	-----	30.8	29.2	29.2	-----	31.3	30.8	30.7	36.5	34.9	34.8	-----	32.0	29.0	29.0
35.1	36.0	36.6	24.2	31.3	30.7	30.4	20.0	39.3	39.4	39.9	35.7	36.3	36.5	18.8	35.8	35.8	35.4
21.4	19.0	18.8	18.1	24.4	23.2	22.8	17.6	25.0	24.3	23.9	22.1	19.2	19.9	15.8	22.7	20.8	20.3
27.0	28.5	28.5	-----	29.6	29.4	29.2	-----	28.0	28.4	28.5	19.1	16.3	16.7	-----	26.2	26.1	26.1
37.2	49.2	40.4	31.4	34.4	42.1	34.5	25.0	34.1	44.0	35.5	43.4	52.0	36.7	32.5	51.9	65.6	51.0
									42.0	-----	40.3	41.0	-----	23.5	36.9	48.2	38.7
31.5	41.6	37.0	23.3	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
10.2	10.0	10.0	5.9	10.0	9.9	9.9	5.7	9.8	9.7	9.6	10.4	10.8	10.8	5.5	10.3	10.4	10.7
6.1	5.4	5.4	2.5	4.8	4.2	4.1	3.3	6.3	5.9	5.9	7.1	6.6	6.7	3.5	6.5	6.0	6.0
5.4	5.1	5.2	3.4	5.4	5.5	5.4	3.4	6.2	6.3	6.3	3.5	3.4	3.5	-----	7.6	8.0	7.9
10.1	10.0	11.1	-----	8.9	8.8	8.8	-----	9.5	10.0	10.0	9.1	8.8	8.9	-----	10.1	9.9	9.9
12.1	11.8	11.8	-----	12.5	12.1	12.1	-----	10.5	10.6	10.6	10.4	10.3	10.3	-----	11.2	11.1	11.1
25.9	26.8	26.7	-----	25.3	25.6	25.5	-----	25.2	25.3	25.2	24.5	24.2	24.2	-----	25.8	25.4	25.5
18.7	18.7	18.7	-----	19.8	20.4	20.6	-----	14.9	15.3	16.4	18.0	18.2	18.2	-----	23.3	23.0	23.0
11.9	10.7	10.6	8.2	10.6	9.7	9.4	8.5	11.6	11.7	11.4	11.0	9.7	10.1	8.5	11.5	11.5	11.3
9.6	9.5	9.5	-----	9.8	9.1	8.9	-----	9.8	9.2	9.4	11.2	9.5	9.7	-----	11.8	10.8	11.0
4.8	3.2	3.1	1.0	3.5	2.6	2.6	1.5	5.1	4.0	3.9	6.8	4.7	4.5	1.7	5.8	3.9	3.7
6.5	4.8	5.3	-----	3.3	3.2	3.9	-----	4.4	4.6	5.5	7.0	6.2	6.8	-----	6.4	5.6	5.9
											7.1	4.8	4.7	-----	6.6	4.8	6.5
6.5	4.0	4.3	-----	4.1	3.4	4.1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
13.8	14.1	14.1	-----	14.5	14.0	14.3	-----	13.4	13.2	13.4	11.6	12.5	12.5	-----	11.4	11.2	11.5
15.3	14.6	14.8	-----	16.1	14.8	14.6	-----	18.6	18.4	18.5	16.3	15.1	15.4	-----	17.5	16.8	16.9
16.3	15.9	16.0	-----	16.3	15.8	15.8	-----	18.4	18.2	18.6	16.4	17.6	17.6	-----	18.0	17.7	17.5
13.6	14.3	14.5	-----	15.4	14.0	13.9	-----	[1] 15.5	[1] 14.9	[1] 14.8	10.4	10.2	10.1	-----	12.6	12.6	12.5
7.1	7.6	7.6	6.2	7.5	8.3	8.2	5.3	6.6	7.3	7.3	6.6	7.4	7.3	6.1	6.7	7.3	7.5
70.2	66.9	66.5	65.7	85.0	87.9	86.7	50.0	68.0	71.8	71.8	76.7	82.9	82.1	52.5	65.4	70.4	70.1
52.1	51.9	52.7	35.8	57.7	55.4	55.6	32.0	52.8	53.5	53.6	49.9	47.3	46.8	31.3	52.8	52.7	52.2
17.1	15.4	15.6	-----	16.1	14.8	14.3	-----	14.9	13.9	13.7	15.7	14.4	13.7	-----	18.4	16.6	16.9
15.7	15.2	15.4	-----	14.2	13.4	13.3	-----	12.6	13.1	13.0	13.9	14.6	14.6	-----	14.2	14.6	14.7
[2] 12.1	[2] 11.5	[2] 11.4	-----	[2] 15.5	[2] 14.0	[2] 14.0	-----	32.2	31.1	31.1	32.3	28.2	29.2	-----	34.0	33.0	33.0
51.8	49.2	49.5	-----	42.0	42.8	42.6	-----	45.4	48.4	50.3	37.9	36.3	35.7	-----	51.2	51.1	50.8

[2] Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

Article	Unit	Seattle, Wash.				Springfield, Ill.			Washington, D. C.			
		Feb. 15—		Jan. 15, 1927	Feb. 15, 1927	Feb. 15, 1926	Jan. 15, 1927	Feb. 15, 1927	Feb. 15—		Jan. 15, 1927	Feb. 15, 1927
		1913	1926						1913	1926		
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak	Pound	22.0	33.3	32.9	33.5	33.9	35.8	35.8	25.9	45.4	46.6	45.8
Round steak	do	20.0	28.8	29.3	29.5	33.4	35.4	35.4	21.8	38.6	39.2	39.1
Rib roast	do	18.4	26.3	27.3	28.0	23.5	23.8	23.8	20.0	34.6	34.4	34.2
Chuck roast	do	15.0	19.2	20.0	20.1	21.0	21.4	21.2	15.6	24.2	24.6	24.1
Plate beef	do	11.4	14.8	15.3	15.6	13.8	15.0	14.7	10.7	13.6	14.5	14.2
Pork chops	do	23.4	38.9	40.1	40.8	33.2	33.3	31.4	19.3	39.5	39.2	37.6
Bacon, sliced	do	30.0	55.7	57.3	57.7	46.3	48.5	48.8	23.3	46.7	46.9	46.7
Ham, sliced	do	29.2	57.9	61.7	62.7	51.8	53.8	54.2	28.2	58.9	59.1	58.7
Lamb, leg of	do	18.3	37.1	36.9	37.2	39.1	38.3	40.0	21.0	40.7	39.2	38.8
Hens	do	24.3	35.2	36.8	36.2	37.0	36.8	35.7	21.3	43.9	40.4	39.8
Salmon, canned, red	do	-----	38.1	34.4	34.6	41.6	36.6	37.0	-----	38.4	31.3	30.7
Milk, fresh	Quart	9.1	12.7	12.0	12.0	12.5	14.4	14.4	9.0	15.0	15.0	15.0
Milk, evaporated	15-16 oz. can	-----	10.7	10.6	10.7	11.9	11.8	11.7	-----	12.0	12.0	11.9
Butter	Pound	42.6	55.4	56.6	56.0	52.0	57.9	58.5	44.0	58.1	62.4	62.4
Oleomargarine (all butter substitutes)	do	-----	31.9	28.3	28.1	31.9	29.3	28.7	-----	31.2	30.5	30.5
Cheese	do	21.6	36.6	35.5	35.1	36.8	38.5	38.5	23.5	38.9	40.8	41.3
Lard	do	17.9	24.3	21.6	21.5	21.9	19.5	19.6	14.4	21.1	18.7	17.8
Vegetable lard substitute	do	-----	28.5	27.7	28.0	28.5	28.0	28.0	-----	24.9	24.6	24.9
Eggs, strictly fresh	Dozen	30.0	36.3	44.1	37.5	36.8	55.2	44.5	36.3	47.1	61.4	43.4
Eggs, storage	do	22.5	-----	32.5	-----	-----	40.7	-----	20.5	45.0	-----	-----
Bread	Pound	5.4	9.7	9.8	9.8	10.1	10.1	10.1	5.5	8.2	9.0	9.0
Flour	do	3.0	5.4	5.0	5.0	6.4	5.7	5.7	3.7	6.7	6.0	5.9
Corn meal	do	3.1	5.0	5.5	5.3	5.0	4.9	4.9	2.5	5.3	5.1	5.1
Rolled oats	do	-----	9.2	9.1	9.0	10.1	10.1	10.2	-----	9.3	9.2	9.1
Corn flakes	8-oz. pkg	-----	12.1	11.5	11.5	11.9	11.6	11.6	-----	10.7	10.7	10.7
Wheat cereal	28-oz. pkg	-----	27.0	27.6	27.6	27.0	27.1	27.1	-----	24.7	24.6	24.6
Macaroni	Pound	-----	18.3	18.7	18.2	19.2	19.0	19.0	-----	23.8	23.2	23.2
Rice	do	7.7	12.8	12.1	12.0	11.2	10.9	10.9	9.6	13.0	12.3	11.6
Beans, navy	do	-----	10.2	9.9	10.0	9.0	9.0	9.1	-----	9.1	8.8	8.8
Potatoes	do	0.9	4.2	3.1	3.0	6.1	4.1	3.9	1.5	6.3	4.4	4.1
Onions	do	-----	4.7	4.4	5.3	5.8	5.4	6.0	-----	6.1	5.5	5.7
Cabbage	do	-----	4.8	4.7	5.2	6.8	4.7	4.8	-----	9.6	4.8	5.8
Beans, baked	No. 2 can	-----	14.2	12.6	12.4	11.8	10.8	11.0	-----	10.9	10.2	10.2
Corn, canned	do	-----	19.0	18.0	17.6	15.7	15.0	15.0	-----	15.4	15.9	15.3
Peas, canned	do	-----	20.5	19.7	19.0	17.2	16.8	16.2	-----	16.8	17.1	17.3
Tomatoes, canned	do	-----	[1] 18.0	[1] 17.0	[1] 17.7	13.6	14.0	13.9	-----	10.8	11.0	10.6
Sugar, granulated	Pound	6.1	7.0	7.6	7.5	7.4	8.2	8.1	5.2	6.5	7.2	7.1
Tea	do	50.0	77.5	78.1	75.4	78.2	83.2	82.7	57.5	88.0	90.6	91.9
Coffee	do	28.0	52.3	51.8	50.6	53.9	52.3	51.7	28.8	48.8	47.5	45.9
Prunes	do	-----	15.3	14.2	14.2	17.1	15.2	15.5	-----	18.0	16.9	16.6
Raisins	do	-----	14.4	13.8	13.8	15.1	15.3	14.9	-----	14.1	14.4	14.0
Bananas	Dozen	-----	[2] 13.4	[2] 13.7	[2] 13.6	[2] 10.3	[2] 9.8	[2] 9.9	-----	35.9	35.7	34.6
Oranges	do	-----	44.7	47.5	47.6	49.5	49.5	52.2	-----	48.2	47.3	47.0

[1] No. 2½ can.

[2] Per pound.

Comparison of Retail Food Costs in 51 Cities

TABLE 6 shows for 39 cities the percentage of increase or decrease in the retail cost of food [3] in February, 1927, compared with the average cost in the year 1913, in February, 1926, and in January, 1927. For 12 other cities comparisons are given for the one-year and the one-month periods. These cities have been scheduled by the bureau at

[3] For list of articles see note 5, p. 143.

different dates since 1913. The percentage changes are based on actual retail prices secured each month from retail dealers and on the average family consumption of these articles in each city.[1]

TABLE 6.—PERCENTAGE CHANGE IN THE RETAIL COST OF FOOD IN FEBRUARY, 1927, COMPARED WITH THE COST IN JANUARY, 1927, FEBRUARY, 1926, AND WITH THE AVERAGE COST IN THE YEAR 1913, BY CITIES

City	Percentage increase, February, 1927, compared with 1913	Percentage decrease, February, 1927, compared with—		City	Percentage increase, February, 1927, compared with 1913	Percentage decrease, February, 1927, compared with—	
		February, 1926	January, 1927			February, 1926	January, 1927
Atlanta	58.9	3.5	3.1	Minneapolis	53.3	4.8	1.5
Baltimore	61.9	3.9	3.0	Mobile		3.2	2.9
Birmingham	62.6	3.7	2.4	Newark	50.0	2.2	1.6
Boston	57.4	3.8	1.8	New Haven	56.8	4.2	2.6
Bridgeport		4.1	3.0	New Orleans	54.7	1.7	1.5
Buffalo	60.7	4.5	3.0	New York	59.1	3.8	1.5
Butte		0.2	0.3	Norfolk		2.8	3.3
Charleston, S. C	59.7	4.2	2.3	Omaha	53.4	4.5	1.6
Chicago	67.9	2.2	2.1	Peoria		2.0	2.1
Cincinnati	57.2	3.3	2.0	Philadelphia	60.1	2.8	2.9
Cleveland	56.1	3.5	2.1	Pittsburgh	60.1	2.3	2.2
Columbus		4.9	3.2	Portland, Me		3.4	1.6
Dallas	52.6	1.5	1.8	Portland, Oreg	39.3	1.0	0.1
Denver	39.4	3.2	3.4	Providence	55.4	6.1	1.9
Detroit	62.9	4.9	2.2	Richmond	63.5	4.5	2.2
Fall River	54.2	4.4	2.2	Rochester		6.0	2.9
Houston		2.7	2.0	St. Louis	59.3	3.3	2.1
Indianapolis	49.9	4.5	3.1	St. Paul		4.2	1.3
Jacksonville	52.7	6.1	1.9	Salt Lake City	32.2	2.6	1.9
Kansas City	52.6	4.6	1.8	San Francisco	51.0	1.5	1.5
Little Rock	49.0	1.9	2.8	Savannah		4.3	2.8
Los Angeles	43.2	2.2	2.5	Scranton	63.0	2.7	1.8
Louisville	51.1	4.1	2.5	Seattle	44.8	2.1	1.3
Manchester	53.6	3.5	1.4	Springfield, Ill		1.9	2.0
Memphis	45.1	5.1	2.8	Washington, D. C	61.9	4.6	3.8
Milwaukee	56.9	2.5	2.8				

Effort has been made by the bureau each month to have all schedules for each city included in the average prices. For the month of February 99.5 per cent of all the firms supplying retail prices in the 51 cities sent in a report promptly. The following-named 46 cities had a perfect record; that is, every merchant who is cooperating with the bureau sent in his report in time for his prices to be included in the city averages: Baltimore, Birmingham, Boston, Bridgeport, Buffalo, Butte, Charleston, S. C., Chicago, Cincinnati, Cleveland, Columbus, Dallas, Denver, Detroit, Fall River, Houston, Indianapolis, Jacksonville, Kansas City, Louisville, Manchester, Memphis, Milwaukee, Minneapolis, Mobile, Newark, New Haven, New Orleans, New York, Norfolk, Omaha, Peoria, Philadelphia, Pittsburgh, Portland, Me., Providence, Richmond, Rochester, St. Louis, St. Paul, San Francisco, Savannah, Scranton, Seattle, Springfield, Ill., and Washington.

The following summary shows the promptness with which the merchants responded in February, 1927:

[1] The consumption figures used from January, 1913, to December, 1920, for each article in each city were given in the November, 1918, issue, pp. 94 and 95. The consumption figures which have been used for each month beginning with January, 1921, were given in the March, 1921, issue, p. 26.

RETAIL PRICE REPORTS RECEIVED DURING FEBRUARY, 1927

Item	United States	Geographical division				
		North Atlantic	South Atlantic	North Central	South Central	Western
Percentage of reports received	99.5	100.0	99.4	100.0	99.4	98.0
Number of cities in each section from which every report was received	46	14	7	14	7	4

Retail Prices of Coal in the United States [a]

THE following table shows the average retail prices of coal on January 15 and July 15, 1913, February 15, 1926, and January 15 and February 15, 1927, for the United States and for each of the cities from which retail food prices have been obtained. The prices quoted are for coal delivered to consumers, but do not include charges for storing the coal in cellar or coal bin where an extra handling is necessary.

In addition to the prices for Pennsylvania anthracite, prices are shown for Colorado, Arkansas, and New Mexico anthracite in those cities where these coals form any considerable portion of the sales for household use.

The prices shown for bituminous coal are averages of prices of the several kinds sold for household use.

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, FEBRUARY 15, 1926, AND JANUARY 15 AND FEBRUARY 15, 1927

City, and kind of coal	1913		1926	1927	
	Jan. 15	July 15	Feb. 15	Jan. 15	Feb. 15
United States:					
Pennsylvania anthracite—					
Stove—					
Average price	**$7.99**	**$7.46**	(1)	**$15.65**	**$15.65**
Index (1913=100.0)	**103.4**	**96.6**	(1)	**202.7**	**202.6**
Chestnut—					
Average price	**$8.15**	**$7.68**	(1)	**$15.42**	**$15.44**
Index (1913=100.0)	**103.0**	**97.0**	(1)	**194.8**	**195.0**
Bituminous—					
Average price	**$5.48**	**$5.39**	**$9.72**	**$9.96**	**$9.86**
Index (1913=100.0)	**100.8**	**99.2**	**178.8**	**183.3**	**181.4**
Atlanta, Ga.:					
Bituminous	$5.88	$4.83	$8.48	$8.67	$8.62
Baltimore, Md.:					
Pennsylvania anthracite—					
Stove	[2] 7.70	[2] 7.24	(1)	[2] 16.00	[2] 16.00
Chestnut	[2] 7.93	[2] 7.49	(1)	[2] 15.50	[2] 15.50
Bituminous			7.90	8.32	8.32
Birmingham, Ala.:					
Bituminous	4.22	4.01	7.72	8.09	8.05

[1] Insufficient data.

[2] Per ton of 2,240 pounds.

[a] Prices of coal were formerly secured semiannually and published in the March and September issues. Since June, 1920, these prices have been secured and published monthly.

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, FEBRUARY 15, 1926, AND JANUARY 15 AND FEBRUARY 15, 1927—Continued

City, and kind of coal	1913		1926	1927	
	Jan. 15	July 15	Feb. 15	Jan. 15	Feb. 15
Boston, Mass.:					
Pennsylvania anthracite—					
Stove	$8.25	$7.50	[1]	$16.50	$16.50
Chestnut	8.25	7.75	[1]	16.25	16.25
Bridgeport, Conn.:					
Pennsylvania anthracite—					
Stove			[1]	16.00	16.00
Chestnut			[1]	16.00	16.00
Buffalo, N. Y.:					
Pennsylvania anthracite—					
Stove	6.75	6.54	[1]	13.75	13.74
Chestnut	6.99	6.80	[1]	13.37	13.37
Butte, Mont.:					
Bituminous			$11.07	11.02	10.94
Charleston, S. C.:					
Bituminous	[2] 6.75	[2] 6.75	11.00	11.00	11.00
Chicago, Ill.:					
Pennsylvania anthracite—					
Stove	8.00	7.80	[1]	17.00	17.00
Chestnut	8.25	8.05	[1]	16.80	16.80
Bituminous	4.97	4.65	9.34	9.85	9.64
Cincinnati, Ohio:					
Bituminous	3.50	3.38	7.77	7.89	7.84
Cleveland, Ohio:					
Pennsylvania anthracite—					
Stove	7.50	7.25	[1]	15.40	15.40
Chestnut	7.75	7.50	[1]	15.05	15.05
Bituminous	4.14	4.14	9.59	9.73	9.69
Columbus, Ohio:					
Bituminous			7.67	7.75	7.74
Dallas, Tex.:					
Arkansas anthracite—					
Egg			[1]	16.00	16.00
Bituminous	8.25	7.21	13.83	13.22	13.22
Denver, Colo.:					
Colorado anthracite—					
Furnace, 1 and 2 mixed	8.88	9.00	[1]	16.00	16.00
Stove, 3 and 5 mixed	8.50	8.50	[1]	16.50	16.50
Bituminous	5.25	4.88	10.68	10.73	10.70
Detroit, Mich.:					
Pennsylvania anthracite—					
Stove	8.00	7.45	[1]	16.17	16.00
Chestnut	8.25	7.65	[1]	15.75	15.67
Bituminous	5.20	5.20	10.53	10.34	10.22
Fall River, Mass.:					
Pennsylvania anthracite—					
Stove	8.25	7.43	[1]	16.75	16.75
Chestnut	8.25	7.61	[1]	16.25	16.25
Houston, Tex.:					
Bituminous			12.50	13.50	13.50
Indianapolis, Ind.:					
Bituminous	3.81	3.70	7.45	7.67	7.56
Jacksonville, Fla.:					
Bituminous	7.58	7.00	11.50	14.00	14.00
Kansas City, Mo.:					
Arkansas anthracite—					
Furnace			[1]	14.50	14.50
Stove No. 4			[1]	15.83	15.83
Bituminous	4.39	3.94	7.98	7.81	7.85
Little Rock, Ark.:					
Arkansas anthracite—					
Egg			[1]	14.00	14.00
Bituminous	6.00	5.33	11.20	10.80	10.90
Los Angeles, Calif.:					
Bituminous	13.52	12.50	15.94	16.50	16.50
Louisville, Ky.:					
Bituminous	4.20	4.00	7.41	8.42	7.82
Manchester, N. H.:					
Pennsylvania anthracite—					
Stove	10.00	8.50	[1]	17.50	17.50
Chestnut	10.00	8.50	[1]	17.50	17.50
Memphis, Tenn.:					
Bituminous	[3] 4.34	[3] 4.22	7.84	8.80	8.78

[1] Insufficient data. [2] Per ton of 2,240 pounds. [3] Per 10-barrel lot (1,800 pounds).

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, FEBRUARY 15, 1926, AND JANUARY 15 AND FEBRUARY 15, 1927—Continued

City, and kind of coal	1913		1926	1927	
	Jan. 15	July 15	Feb. 15	Jan. 15	Feb. 15
Milwaukee, Wis.:					
Pennsylvania anthracite—					
Stove	$8.00	$7.85	(1)	$16.80	$16.80
Chestnut	8.25	8.10	(1)	16.65	16.65
Bituminous	6.25	5.71	$11.42	11.32	10.49
Minneapolis, Minn.:					
Pennsylvania anthracite—					
Stove	9.25	9.05	(1)	18.10	18.10
Chestnut	9.50	9.30	(1)	17.75	17.95
Bituminous	5.89	5.79	11.17	11.75	11.75
Mobile, Ala.:					
Bituminous			9.81	10.12	9.92
Newark, N. J.:					
Pennsylvania anthracite—					
Stove	6.50	6.25	(1)	14.00	14.00
Chestnut	6.75	6.50	(1)	13.50	13.50
New Haven, Conn.:					
Pennsylvania anthracite—					
Stove	7.50	6.25	(1)	15.40	15.35
Chestnut	7.50	6.25	(1)	15.40	15.35
New Orleans, La.:					
Bituminous	[3] 6.06	[3] 6.06	11.11	11.29	11.29
New York, N. Y.:					
Pennsylvania anthracite—					
Stove	7.07	6.66	(1)	14.75	14.75
Chestnut	7.14	6.80	(1)	14.50	14.50
Norfolk, Va.:					
Pennsylvania anthracite—					
Stove			(1)	16.00	16.00
Chestnut			(1)	16.00	16.00
Bituminous			10.52	9.68	9.73
Omaha, Nebr.:					
Bituminous	6.63	6.13	10.31	10.19	10.19
Peoria, Ill.:					
Bituminous			7.07	7.29	7.18
Philadelphia, Pa.:					
Pennsylvania anthracite—					
Stove	[2] 7.16	[2] 6.89	(1)	[2] 15.79	[2] 15.79
Chestnut	[2] 7.38	[2] 7.14	(1)	[2] 15.54	[2] 15.54
Pittsburgh, Pa.:					
Pennsylvania anthracite—					
Chestnut	[2] 8.00	[2] 7.44	(1)	15.88	15.88
Bituminous	[4] 3.16	[4] 3.18	6.13	6.24	6.24
Portland, Me.:					
Pennsylvania anthracite—					
Stove			(1)	16.80	16.98
Chestnut			(1)	16.80	16.98
Portland, Oreg.:					
Bituminous	9.79	9.66	13.12	13.34	13.49
Providence, R. I.:					
Pennsylvania anthracite—					
Stove	[5] 8.25	[5] 7.50	(1)	[5] 16.50	[5] 16.50
Chestnut	[5] 8.25	[5] 7.75	(1)	[5] 16.50	[5] 16.50
Richmond, Va.:					
Pennsylvania anthracite—					
Stove	8.00	7.25	(1)	16.50	16.50
Chestnut	8.00	7.25	(1)	16.50	16.50
Bituminous	5.50	4.94	11.34	11.66	11.70
Rochester, N. Y.:					
Pennsylvania anthracite—					
Stove			(1)	14.60	14.60
Chestnut			(1)	14.15	14.15
St. Louis, Mo.:					
Pennsylvania anthracite—					
Stove	8.44	7.74	(1)	17.45	17.45
Chestnut	8.68	7.99	(1)	17.20	17.20
Bituminous	3.36	3.04	6.62	7.50	7.44

[1] Insufficient data.
[2] Per ton of 2,240 pounds.
[3] Per 10-barrel lot (1,800 pounds).
[4] Per 25-bushel lot (1,900 pounds).
[5] 50 cents per ton additional is charged for "binning." Most customers require binning or basketing the coal into the cellar.

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, FEBRUARY 15, 1926, AND JANUARY 15 AND FEBRUARY 15, 1927—Continued

City, and kind of coal	1913		1926	1927	
	Jan. 15	July 15	Feb. 15	Jan. 15	Feb. 15
St. Paul, Minn.:					
Pennsylvania anthracite—					
Stove	$9.20	$9.05	[1]	$18.10	$18.10
Chestnut	9.45	9.30	[1]	17.75	17.95
Bituminous	6.07	6.04	$11.47	12.16	12.21
Salt Lake City, Utah:					
Colorado anthracite—					
Furnace, 1 and 2 mixed	11.00	11.50	[1]	18.00	18.00
Stove, 3 and 5 mixed	11.00	11.50	[1]	18.00	18.00
Bituminous	5.64	5.46	8.42	8.47	8.47
San Francisco, Calif.:					
New Mexico anthracite—					
Cerillos egg	17.00	17.00	[1]	26.50	26.50
Colorado anthracite—					
Egg	17.00	17.00	[1]	25.75	25.75
Bituminous	12.00	12.00	17.06	17.11	17.06
Savannah, Ga.:					
Bituminous	----------	----------	[6] 12.75	[6] 13.25	[6] 13.25
Scranton, Pa.:					
Pennsylvania anthracite—					
Stove	4.25	4.31	[1]	11.00	11.00
Chestnut	4.50	4.56	[1]	10.67	10.67
Seattle, Wash.:					
Bituminous	7.63	7.70	9.92	10.47	10.47
Springfield, Ill.:					
Bituminous	----------	----------	4.38	4.38	4.35
Washington, D. C.:					
Pennsylvania anthracite—					
Stove	[2] 7.50	[2] 7.38	[1]	[2] 15.86	[2] 15.81
Chestnut	[2] 7.65	[2] 7.53	[1]	[2] 15.54	[2] 15.54
Bituminous—					
Prepared sizes, low volatile	----------	----------	[2] 13.83	[2] 12.00	[2] 11.75
Prepared sizes, high volatile	----------	----------	[2] 9.88	[2] 9.75	[2] 9.75
Run of mine, mixed	----------	----------	[2] 8.06	[2] 8.31	[2] 8.10

[1] Insufficient data.
[2] Per ton of 2,240 pounds.
[6] All coal sold in Savannah is weighed by the city. A charge of 10 cents per ton or half ton is made. This additional charge has been included in the above prices.

Index Numbers of Wholesale Prices in February, 1927

CONTINUED recession of wholesale prices of commodities is shown for February by information collected in representative markets by the Bureau of Labor Statistics of the United States Department of Labor. The bureau's weighted index number, which includes 404 commodities or price series, registered 146.4 for February compared with 146.9 for January, a decline of one-third of 1 per cent. Compared with February, 1926, with an index number of 155, there was a decrease of 5½ per cent.

In all groups of commodities included in the comparison, except clothing materials, house-furnishing goods, and miscellaneous commodities, there were decreases in the price level ranging from less than one-tenth of 1 per cent in the case of chemicals and drugs to 1½ per cent in the case of fuels and 1¾ per cent in the case of metals. Clothing materials and miscellaneous commodities averaged slightly higher than in January, while practically no change was shown for house-furnishing goods.

Of the 404 commodities or price series for which comparable information for January and February was collected, increases were shown in 104 instances and decreases in 118 instances. In 182 instances no change in price was reported.

INDEX NUMBERS OF WHOLESALE PRICES BY GROUPS OF COMMODITIES

[1913=100]

Commodity group	February, 1926	1927	
		January	February
Farm products	149.9	137.2	136.9
Foods	153.2	149.6	148.2
Clothing materials	183.9	167.3	168.7
Fuels	179.4	179.8	177.1
Metals and metal products	128.4	124.4	122.4
Building materials	177.1	169.7	167.9
Chemicals and drugs	132.3	122.1	122.0
House-furnishing goods	163.9	157.4	157.5
Miscellaneous	132.9	117.9	118.5
All commodities	155.0	146.9	146.4
Raw materials [1]	160.6	149.6	149.9
Producers' goods [1]	130.1	124.5	123.5
Consumers' goods [1]	163.4	156.9	156.0

[1] Federal Reserve Board grouping.

Comparing prices in February with those of a year ago, as measured by changes in the index numbers, it is seen that large decreases took place in farm products, clothing materials, chemicals and drugs, and miscellaneous commodities, with smaller decreases in foods, metals, building materials, and house-furnishing goods. Fuels, also, in line with other commodities, averaged lower than in the corresponding month of 1926.

Comparison of Retail Price Changes in the United States and in Foreign Countries

THE principal index numbers of retail prices published by foreign countries have been brought together with those of this bureau in the subjoined table after having been reduced in most cases to a common base, namely, prices for July, 1914, equal 100. This base was selected instead of the average for the year 1913, which is used in other tables of index numbers compiled by the bureau, because of the fact that in numerous instances satisfactory information for 1913 was not available. A part of the countries shown in the table now publish index numbers of retail prices on the July, 1914, base. In such cases, therefore, the index numbers are reproduced as published. For other countries the index numbers here shown have been obtained by dividing the index for each month specified in the table by the index for July, 1914, or the nearest period thereto as published in the original sources. As stated in the table, the number of articles included in the index numbers for the different countries differs widely. These results, which are designed merely to show price trends and not actual differences in the several countries, should not, therefore, be considered as closely comparable with one another. In certain instances, also, the figures are not absolutely comparable from month to month over the entire period, owing to slight changes in the list of commodities and the localities included on successive dates.

INDEX NUMBERS OF RETAIL PRICES IN THE UNITED STATES AND IN OTHER COUNTRIES

Country	United States	Canada	Belgium	Czecho-slovakia	Den-mark	Finland	France (except Paris)	France (Paris)	Germany
Number of localities	51	60	59	Entire country	100	21	320	1	71
Commodities included	43 foods	29 foods	56 (foods, etc.)	29 foods	Foods	36 foods	13 (11 foods)	13 (11 foods)	Foods
Computing agency	Bureau of Labor Statistics	Department of Labor	Ministry of Industry and Labor	Office of Statistics	Government Statistical Department	Central Bureau of Statistics	Ministry of Labor	Ministry of Labor	Federal Statistical Bureau
Base=100	July, 1914	July, 1914	April, 1914	July, 1914	July, 1914	January-June, 1914	August, 1914	July, 1914	October, 1913-July, 1914
Year and month									
1923									
Jan.	141	142	383	----------	180	1108	----------	309	----------
Feb.	139	142	397	----------	----------	1103	331	316	----------
Mar.	139	145	408	----------	----------	1096	----------	321	----------
Apr.	140	143	409	----------	----------	1047	----------	320	----------
May	140	140	413	----------	----------	1016	337	325	----------
June	141	138	419	----------	----------	1004	----------	331	----------
July	144	137	429	----------	188	1003	----------	321	----------
Aug.	143	142	439	----------	----------	1087	349	328	----------
Sept.	146	141	453	----------	----------	1103	----------	339	----------
Oct.	147	144	458	----------	----------	1140	----------	349	----------
Nov.	148	144	463	----------	----------	1133	373	355	----------
Dec.	147	145	470	----------	----------	1112	----------	365	----------
1924									
Jan.	146	145	480	836	194	1089	----------	376	127
Feb.	144	145	495	838	----------	1070	400	384	117
Mar.	141	143	510	830	----------	1067	----------	392	120
Apr.	138	137	498	829	----------	1035	----------	380	123
May	138	133	485	825	----------	1037	393	378	126
June	139	133	492	833	----------	1040	----------	370	120
July	140	134	493	837	200	1052	----------	380	126
Aug.	141	137	498	842	----------	1125	400	366	122
Sept.	144	139	503	853	----------	1125	----------	374	125
Oct.	145	139	513	877	----------	1156	----------	383	134
Nov.	147	141	520	889	----------	1160	426	396	135
Dec.	148	143	521	891	----------	1160	----------	404	135
1925									
Jan.	151	145	521	899	215	1130	----------	408	137
Feb.	148	147	517	911	----------	1120	440	410	145
Mar.	148	145	511	904	----------	1152	----------	415	146
Apr.	148	142	506	901	----------	1137	----------	409	144
May	148	141	502	894	----------	1097	434	418	141
June	152	141	505	914	----------	1101	----------	422	146
July	156	141	509	916	210	1145	----------	421	154
Aug.	157	146	517	894	----------	1222	451	423	154
Sept.	156	146	525	884	----------	1187	----------	431	153
Oct.	158	147	533	875	----------	1165	----------	433	151
Nov.	164	151	534	863	----------	1164	471	444	147
Dec.	162	156	534	866	----------	1138	----------	463	146
1926									
Jan.	161	157	527	854	177	1090	----------	480	143
Feb.	158	155	526	845	----------	1106	503	495	142
Mar.	156	154	521	832	----------	1100	----------	497	141
Apr.	159	153	529	832	----------	1085	----------	503	142
May	158	152	558	837	----------	1078	523	522	142
June	156	149	579	861	----------	1090	----------	544	143
July	154	149	637	876	159	1105	----------	574	145
Aug.	152	150	681	878	----------	1153	610	587	146
Sept.	155	147	684	878	----------	1137	----------	590	145
Oct.	157	147	705	888	----------	1126	----------	624	145
Nov.	158	148	730	902	----------	1114	647	628	148
Dec.	158	151	741	912	----------	1110	----------	599	150

INDEX NUMBERS OF RETAIL PRICES IN THE UNITED STATES AND IN OTHER COUNTRIES—Continued

Country	Italy	Netherlands	Norway	Sweden	Switzerland	United Kingdom	South Africa	India (Bombay)	Australia	New Zealand
Number of localities	47	6	31	49	33	630	9	1	30	25
Commodities included	20 foods and charcoal	29 (27 foods)	Foods	50 (43 foods, 7 fuel and light)	Foods	21 foods	24 foods	17 foods	46 foods and groceries	59 foods
Computing agency	Ministry of National Economy	Central Bureau of Statistics	Central Bureau of Statistics	Social Board	Labor Office (revised)	Ministry of Labor	Office of Census and Statistics	Labor Office (revised)	Bureau of Census and Statistics	Census and Statistics Office
Base=100	1913	January-June, 1914	July, 1914	July, 1914	July, 1914	July, 1914	1914	July, 1914	July, 1914	July, 1914
Year and month										
1923										
Jan	542	148	214	166	160	175	117	151	145	139
Feb	527	149	214	165	158	173	117	150	144	140
Mar	524	149	214	166	159	171	117	149	145	141
Apr	530	149	212	163	161	168	117	150	152	142
May	535	147	214	161	164	162	118	148	156	143
June	532	145	213	161	166	160	118	146	162	142
July	518	145	218	160	166	162	116	148	164	142
Aug	512	143	220	161	166	165	115	149	165	143
Sept	514	142	218	165	167	168	115	149	161	145
Oct	517	145	217	165	167	172	117	147	157	146
Nov	526	149	221	164	171	173	120	147	157	147
Dec	528	149	226	164	172	176	118	152	156	147
1924										
Jan	527	150	230	163	173	175	120	154	155	150
Feb	529	151	234	162	172	177	122	151	153	149
Mar	523	152	241	162	171	176	122	147	152	150
Apr	527	152	240	159	169	167	122	143	150	150
May	530	151	241	159	169	163	122	143	151	150
June	543	151	240	158	170	160	120	147	149	150
July	538	150	248	159	170	162	117	151	148	148
Aug	534	150	257	163	170	164	117	156	147	146
Sept	538	152	261	165	170	166	117	156	146	145
Oct	556	154	264	172	174	172	120	156	146	145
Nov	583	156	269	172	175	179	122	157	147	148
Dec	601	157	274	172	175	180	121	156	148	150
1925										
Jan	609	156	277	170	172	178	120	152	148	147
Feb	609	157	283	170	172	176	120	152	149	146
Mar	610	157	284	171	171	176	121	155	151	149
Apr	606	155	276	170	169	170	124	153	152	149
May	600	154	265	169	168	167	123	151	154	150
June	602	152	261	169	169	166	122	149	155	149
July	605	152	260	169	169	167	120	152	156	151
Aug	619	152	254	170	169	168	119	147	156	152
Sept	642	152	241	168	170	170	118	146	156	153
Oct	645	149	228	166	168	172	119	148	157	155
Nov	652	149	223	165	168	172	117	149	156	156
Dec	653	148	221	164	167	174	116	151	155	154
1926										
Jan	658	148	216	162	165	171	116	151	155	154
Feb	649	147	212	160	163	168	117	150	154	153
Mar	636	147	205	159	161	165	118	151	159	152
Apr	633	146	198	158	161	159	119	150	163	151
May	643	146	195	157	159	158	119	150	163	151
June	647	146	194	157	159	158	118	152	162	151
July	645	146	198	156	159	161	117	155	159	149
Aug	648	146	196	156	157	161	117	153	157	150
Sept	656	149	193	157	158	162	117	152	155	148
Oct	662	148	191	157	160	163	120	153	153	147
Nov	655	148	186	158	159	169	119	152	155	146
Dec	622	146	184	157	159	169	117	154	158	149

COST OF LIVING

Expenditures of Farm Families with Special Reference to Health[1]

THE amount spent by the average farm family for various health purposes has been studied in connection with a survey by the United States Department of Agriculture and cooperating agencies in the different States covering the average expenditures of farm families.

The study included 2,886 farm families in different sections of the country. The families selected were typical for the localities visited; that is, the selection of homes of any one size or any one level of living was avoided and normal families were represented in that on each farm a man acted as farm operator and a woman as home maker.

Eleven States were covered in the survey, representing the East, South, and the Middle West.

The average size of the household, by which is meant all the persons sheltered in one dwelling, was 4.8 persons, and the average family, including in a few cases the children at school or in college, was 4.4 persons.

Average expenditures of all families in actual cash were found to be $914, the value of produce raised on the farm that was used by the family raising this amount to $1,598. The average per State ranged between $1,482 in South Carolina and $1,948 in New Hampshire.

The principal items of the budget were food, clothing, rent, furnishings, operating expense, maintenance of health, advancement, personal, insurance (life or health), and miscellaneous.

The average value of the food used was $659 which was 41.2 per cent of the total cost of living, 66.9 per cent of this amount being raised on the farm. Clothing costs amounted to $235, or 14.7 per cent of the value of all goods used. Ten per cent of the total value of the farm house was estimated as the cost of rent, this being considered to cover taxes, insurance, repairs on the house and 6 per cent interest on the investment. The average rental charge for all areas was $200.

Expenditures for certain items in operating expenses which were considered to have a bearing on the family health were analyzed. These included an average of $12 yearly for hired help in the house, $6 for laundry outside the home, and $80 for an automobile for family use. The total expenditure for operating expenses was $213. Advancement costs averaged $104 per family, the cost of recreation and special trips which may be considered matters of health amounting to $22.

The average annual cost of house furnishings was $40, personal expenses amounted to $41, and the amount spent for miscellaneous items amounted to only $2.70 per family.

In the groups of expenditures directly concerned with health, the average amount spent on life and health insurance was $40.80 per

[1]The Nation's Health, Chicago, January, 1927, pp. 12, 13: "Include health expenditures of farm families in survey: Studies carried on by U. S. Department of Agriculture show that annual average health maintenance expenditures totaled $61.60 for a family of four," by Caroline B. Sherman.

family, more than half of the families reporting no expenditure for this item. The expenditure for the maintenance of health; that is, for medicines and the services of doctors or nurses, or for hospital care, averaged $61.60 per family or 3.8 per cent of all expenditures. The average was highest in the North Central States, $72.10 per family; in the New England States the cost averaged $61.30, and in the Southern States, $48.50.

Three hundred and three families, or more than one-tenth of the families studied, reported no expenditures for the maintenance of health. The average expenditure for this purpose does not represent, therefore, the extent of serious or minor sickness prevailing in the families studied; while many families reported that no money was spent for medicines, or for doctors', dentists', or nurses' services, a number reported extremely heavy expenditures for major operations or for doctors' or nurses' care either at home or in a hospital.

The length of the workday on the farm, which has a definite bearing on the question of health, was found to be 11 hours both for outside work and in the home. There seemed to be little or no relationship between the average length of the workday and the amount of money expended. With an increase in the total average expenditure from the lowest point, $486, to $3,779, the largest amount spent, there was only a slight decrease in the length of the workday for the home maker so that it was apparent that the home makers using more goods do not find added leisure in which to enjoy their use.

Changes in Cost of the Canadian Family Budget, 1921 to 1926 [1]

THE table following shows the cost per week, in specified months from 1921 to 1926, of the family budget in terms of average retail prices of certain classes of commodities in 60 Canadian cities:

COST PER WEEK OF FAMILY BUDGET IN CANADA IN SPECIFIED MONTHS, 1921 TO 1926 [a]

Year and month	All foods	Starch, laundry	Fuel and lighting	Rent (¼ month)	Total
1921: January	$14.48	$0.049	$4.17	$6.60	$25.30
July	10.96	.044	3.70	6.83	21.54
1922: January	11.03	.042	3.53	6.92	21.52
July	10.27	.040	3.41	6.95	20.67
1923: January	10.52	.040	3.61	6.96	21.13
July	10.17	.040	3.48	6.97	20.65
1924: January	10.78	.041	3.49	6.92	21.23
July	9.91	.041	3.37	6.98	20.30
1925: January	10.77	.041	3.37	6.91	21.09
July	10.49	.041	3.28	6.89	20.70
1926: January	11.63	.041	3.43	6.86	21.96
July	11.07	.042	3.32	6.87	21.30
August	11.10	.042	3.31	6.87	21.32
September	10.94	.041	3.31	6.85	21.15
October	10.93	.041	3.31	6.85	21.14
November	11.01	.042	3.33	6.85	21.24
December	11.18	.041	3.34	6.85	21.41

[a] This budget is intended to show the changes in the cost of items included, not to show the minimum cost for an average family.

[1] Canada. Department of Labor. Prices in Canada and other countries, 1926. Ottawa, 1927. Issued as a supplement to the Labor Gazette, January, 1927, pp. 4 and 5.

LABOR AGREEMENTS, AWARDS, AND DECISIONS

Labor Agreements

Hoisting Engineers—New York City

A PREFERENTIAL agreement was made between the United Hoisting Engineers' Local No. 403 and the Iron League of New York, November 16, 1926. It provides for a joint arbitration board of three members and that no strikes or lockouts are to occur during the existence of the agreement. Leaving work by 10 per cent of the members of the local is to be considered a breach of the agreement. The following sections are self-explanatory:

SECTION I. The league agrees to give preference in employment to the members of the local and the local agrees to man the work of the league at all times with competent men. It is understood and agreed between the parties hereto that in case the local is not able to man a job or jobs of any or all of the members of the league within a reasonable time, 24 hours, after a demand has been made, the league shall be at liberty to employ such engineers as may be available.

SEC. XIII. It is understood and agreed between the parties to this agreement that the local will cooperate with the league in the matter of education, training, and securing of licensed engineers.

SEC. XIV. The league may employ a master mechanic, who shall be a member of the local and who shall have entire charge of the hiring and placing of engineers needed by the members of the league.

Molders

THE conference agreements in force between the International Molders' Union and the organization formerly known as the Stove Founders' National Defense Association, but now known as the Manufacturers' Protective and Development Association, effective January 1, 1925, have been continued without change for another year from January 1, 1927.

Awards and Decisions

Bricklayers and Plasterers

ON THE 28th of January, 1927, a unanimous decision relative to a controversy between the bricklayers' and plasterers' unions was made by a board of arbitration consisting of Elihu Root, as chairman, George T. Thornton, first vice president of the bricklayers' union, and Hugh Frayne, an organizer of the American Federation of Labor, representing the plasterers' union. The decision is here given practically in full. Accompanying the decision was a long opinion by the chairman analyzing the testimony, but it was not printed as a part of the decision.

The arbitral tribunal created under the agreement entered into at Atlantic City, N. J., on October 2, 1925, between the Bricklayers, Masons, and Plasterers' International Union and the Operative Plasterers and Cement Finishers' International Association, containing the following provisions:

"The following questions shall be submitted to a tribunal created under the terms of this agreement, the decision of which shall be accepted and complied with by all parties to this agreement.

"Was the Operative Plasterers and Cement Finishers' International Association justified in considering the 1911 agreement abrogated after being notified by the Bricklayers, Masons and Plasterers' International Union that they had abrogated the two agreements governing artificial stone and the plastering of walls to receive tile, and would refer these two questions to the National Board for Jurisdictional Awards?

"After being notified by the Bricklayers, Masons, and Plasterers' International Union that the agreements governing artificial stone and the plastering of walls to receive tile were considered abrogated and no longer in effect by the Bricklayers, Masons, and Plasterers' International Union, was the action of the Operative Plasterers and Cement Finishers' International Association in establishing locals in the cities and towns in contention in the State of Florida, justified or not?"

Has received and considered all the evidence and arguments produced by the respective parties upon the questions above stated.

Upon the first question submitted the tribunal decides:

That the Operative Plasterers and Cement Finishers' International Association was not justified in considering the 1911 agreement abrogated after being notified by the Bricklayers, Masons, and Plasterers' International Union that they had abrogated the two agreements governing artificial stone and the plastering of walls to receive tile and would refer these two questions to the National Board for Jurisdictional Awards.

Upon the second question submitted the tribunal decides:

That after being notified by the Bricklayers, Masons, and Plasterers' International Union that the agreements governing artificial stone and the plastering of walls to receive tile were considered abrogated and no longer in effect by the Bricklayers, Masons, and Plasterers' International Union, the action of the Operative Plasterers and Cement Finishers' International Association in establishing locals in the cities and towns in contention in the State of Florida was not justified.

Clothing Industry—New York City

TWO cases (Nos. 328 and 330) of alleged lockout were recently decided by the impartial chairman in the New York clothing industry, February 19 and 26, 1927. In the former an argument had arisen between the firm and the cutters over the alleged inefficiency and carelessness of one and the general unsatisfactory work done by all. The cutters left the shop to discuss the matter with the union officials. The business agent immediately returned the men to the shop but the firm refused to receive them. The union declared this to be a lockout and requested the impartial chairman to return the men and have them compensated for the time lost. The firm claimed that the men had left the shop of their own accord and that it was acting within its rights in refusing to take them back.

The impartial chairman strongly disapproves of the action of the men in walking out of the shop and feels that if the men felt they had a just grievance against the firm, the shop chairman could have taken the matter up with the proper union officials. In view of the fact that the men walked out as they did, the request for back pay is denied. Since the union attempted to return the men to work within an hour or two after the walkout, and as the workers have been employed by the firm for a number of years, and as they have already lost a week's pay, the impartial chairman orders the firm to take back all of the four cutters involved and directs the union and the exchange to take up immediately any grievance which the firm may have against any of its workers. This decision is made without prejudice to the merits of the original complaint of the firm against its cutters.

In the second case the firm closed the shop, alleging inability to keep it running because of the delay in adjusting a matter previously brought before the impartial chairman. The workers called this a lockout and requested compensation for the time lost.

The impartial chairman disapproves of the action of the firm and cautions the firm against again taking the law into its own hands, however great the provocation may be If the firm feels that it is not getting relief promptly enough or if it feels that it has a grievance against the workers, the matter should be immediately referred to the exchange. If the matter is very urgent the impartial chairman will hear the case at once. Although in the opinion of the impartial chairman the firm did wrong in stopping the shop, the impartial chairman does not order at this time that the men be compensated for the time lost. The firm is urged, however, to take up all matters through the orderly channels established in the industry.

Locomotive Firemen—Eastern District

THE mediation agreement between the Brotherhood of Locomotive Firemen and Enginemen and certain eastern railroads was signed February 5, 1927.

In the fall of 1925, a vote was taken by the union, which showed that an overwhelming majority of the members favored the inauguration of a concerted movement for an increase in wages. The matter was delayed during the spring of 1926 in order to enable the Brotherhood of Locomotive Engineers to join with them. It was then decided that each union should work separately, and the firemen made a demand on the general manager of each road for an increase in wages. In every case the demand was refused, whereupon the union requested that the roads join in authorizing the appointment of a conference committee. This was agreed to, and on January 8, 1927, representatives of the two bodies met and the firemen submitted their demands, as follows:

PROPOSED CHANGES IN RATES OF PAY, RULES, AND WORKING CONDITIONS OF LOCOMOTIVE FIREMEN, HELPERS, HOSTLERS, AND OUTSIDE HOSTLER HELPERS

1. (*a*) *Proposed rates of pay.*—Except as otherwise provided herein, existing rates of pay for firemen, helpers, hostlers, and outisde hostler helpers shall be increased $1 per day.

(*b*) In freight service on steam, electric, or other power weighing 250,000 pounds and over on drivers and on mallet engines, existing rates of pay shall be increased $1.25 per day.

(*c*) Gradations of locomotives, according to weight on drivers, to be extended to 550,000 pounds and over in freight service, with an additional increase of 25 cents per day to be applied for each 50,000 pounds above 250,000 pounds on drivers.

(*d*) Rates applicable to mallet locomotives to be applied to three-cylinder locomotives in all classes of service, according to weight on drivers.

(*e*) It is understood that the weight on all other power-driven wheels will be added to the weight on drivers of locomotives that are equipped with boosters, and the weights produced by such increased weights shall fix the rates for the respective classes of service.

(*f*) In all passenger service, the earnings from mileage, overtime or other rules applicable for each day service is performed shall not be less than $6.25 for firemen.

(*g*) For local or way freight service, except where higher differentials exist, 40 cents per 100 miles or less for firemen shall be added to the through freight rates, according to class of engine; miles over 100 to be paid for pro rata.

2. *Overtime—Short turn-around passenger service.*—Firemen and helpers on short turn-around passenger runs, no single trip of which exceeds 80 miles;

including suburban and branch-line service, shall be paid overtime, on the minute basis at pro rata rates for all time in excess of 8 hours, computed continuously from the time first required to report for duty to the final release at the end of the last run. This rule applies regardless of mileage made. For calculating overtime under this rule the management may designate the initial trip.

3. *Overtime—Passenger service (except short turn-around service).*—Overtime in all passenger service (except short turn-around service) shall be paid for on the minute basis at a rate per hour of not less than one-fifth of the daily rate herein provided, according to the class of engine or other power used.

4. *Mechanical stokers.*—Mechanical stokers shall be installed on all coal-burning locomotives in road service weighing 175,000 pounds and over on drivers. Two firemen shall be employed on such locomotives until so equipped.

5. *Meals—Freight service.*—Firemen and helpers employed in freight service shall be given a reasonable amount of time for meals; they to notify the dispatcher if possible to do so.

6. *Allowance for meals and lodging.*—Firemen and helpers shall be allowed 50 cents per meal and 50 cents per lodging when away from home.

7. *Mountain and desert differentials.*—Existing differentials for divisions or portions thereof; or mountain or desert territory as compared with valley territory, whether expressed in rates or constructive mileage allowances, are preserved.

8. *Saving clause.*—Existing rates of pay, in excess of standard rates, shall be increased the same amount as proposed for the standard rates.

Existing rules, including those modified herein, considered more favorable by committees on individual roads, are preserved.

On January 21 the question was submitted to mediation under the provisions of the railway labor act, and on February 5 an agreement was signed by representatives of the two sides. The agreement increases the wages about 7½ per cent. The new scale is given in full on page 90.

The other demands were answered as follows:

1. (*e*) *Booster-equipped locomotives.*—The following defines the bases for fixing the weight on drivers of a booster-equipped locomotive.

Booster on locomotive trailer.—The weight on the power-driven trailer wheels will be added to the weight on drivers.

Booster on tender.—When a locomotive leaves a terminal with booster in condition to operate the weight on drivers will be determined by adding the tractive effort of the booster to the tractive effort of the locomotive and establish new weight on drivers proportionate to the increased tractive effort.

EXAMPLE.—Locomotive without booster weighs 224,000 pounds on drivers, with tractive effort of 47,500 pounds. Tractive effort equals 21.2 per cent of weight on drivers. Booster adds 10,000 pounds to the tractive effort, making total tractive effort 57,500 pounds; 57,500 pounds is 21.2 per cent of 271,000 pounds, the new weight on drivers.

1 (*f*).—In all passenger service, the earnings from mileage, overtime or other rules applicable, for each day service is performed, shall be not less than $5.64.

1 (*g*).—For local or way freight service, except where higher differentials exist, 40 cents per 100 miles or less shall be added to the through freight rates, according to class of engine; miles over 100 to be paid for pro rata.

1, 2, 3, 4, 5, and 6.—Proposed rules 1 (*c*) and (*d*)—except as modified by foregoing tables—and 2, 3, 4, 5, and 6 are withdrawn without prejudice.

7. *Mountain and desert differentials.*—Existing differentials for divisions or portions thereof; or mountain or desert territory as compared with valley territory, whether expressed in rates or constructive mileage allowances, are preserved.

8. *Saving clause.*—Existing rates of pay in excess of standard rates shall be increased the same amount as provided for the standard rates.

The roads participating in the agreement were the following, with their subsidiaries:

Baltimore & Ohio.
Boston & Maine.
Buffalo, Rochester & Pittsburgh.
Central Railroad of New Jersey.
Chicago, Indianapolis & Louisville.

Cincinnati, Indianapolis & Western.
Delaware, Lackawanna & Western.
Erie.
Hocking Valley.
Indianapolis Union.
Lehigh Valley.
Long Island.
Maine Central.
Boston & Albany.
Cleveland, Cincinnati, Chicago & St. Louis.
Michigan Central.
New York Central.
Pittsburgh & Lake Erie.
New York, Chicago, & St. Louis.
New York, New Haven & Hartford.
Pennsylvania Railroad (excluding Ohio River & Western Ry. and Waynesburg & Washington R. R.).
Pittsburgh & West Virginia.
Reading Company.
Rutland.

Railroads—Reclassification of Employees

DOCKET No. 60 was decided by the station service board of adjustment, operating department, of the New York, New Haven, and Hartford System on February 18, 1927. It seems that in March, 1926, the company had reclassified certain check clerks as assistant foremen, increasing their wage from $29.22 to $31.96 per week, giving to each one jurisdiction over more than one gang but without otherwise materially changing their duties. On October 21, 1926, certain positions at Pier 37, New York, were abolished, and six days later seven positions of supervisory foremen at $165 per month, one assistant general foreman at $175, and an assistant to general foreman at $200 per month were established at the same place. These offices were not covered by the agreement. The other employees protested this action because the positions thus "classified as assistant foremen are in reality nothing more than check clerks, that the newly created positions of foremen should be retained on their former daily basis of pay and be included within the scope of the agreement; denial is made of the allegations on the part of the company representatives that Messrs. W. [assistant general foreman] and M. [one of the supervisory foremen] having charge of the inward and outward loading, have any jurisdiction over the newly created positions of supervisory foremen and that they are in reality merely the former positions of chief delivery clerk and chief receiving clerk under another name."

The position of the company was as follows:

First. Classification of assistant foreman is proper by reason of the jurisdiction over more than one gang assigned when the reclassification was made.

Second. That the classification of assistant foreman being proper, that necessarily the establishment of monthly rated supervisory foremen's positions were likewise proper and which automatically excluded such positions from the scope of the agreement.

Third. That Messrs. W. and M. do have entire jurisdiction over the supervisory foremen in so far as the inbound and outbound loading are concerned.

Fourth. That no injustice had been done any of the individuals involved by reason of the fact that the rates of pay as established are in excess of the earnings produced by the application of the former daily and overtime rates and that the seniority rights of individuals involved were considered in their assignments to the positions.

The board decided:

The positions of assistant foremen established in March, 1926, will be reclassified as check clerks.

Positions of supervisory foremen having supervision over the heretofore existing positions of assistant foremen will be reclassified as foremen and daily rates in effect prior to reclassification be established.

Former position of foreman H. [supervisory foreman] having been abolished account transfer of lighterage work to Harlem River, it is not affected by the above except to extent that a new classification and rate should be established for him on basis of the rate and classification established by this decision for other positions of like character.

The board defers decision in the case of Messrs. W. and M. pending check of their duties to determine character and scope of their supervision. Committee to be appointed by the chairman to make this check and to report at the next meeting of the board.

IMMIGRATION AND EMIGRATION

Statistics of Immigration for January, 1927

By J. J. KUNNA, CHIEF STATISTICIAN UNITED STATES BUREAU OF IMMIGRATION

THE statistical review for January, 1927, shows that a total of 28,023 aliens were admitted to the United States, 18,804 being classed as immigrants and 9,219 as nonimmigrants. A little over one-third of these aliens, or 9,432, were of the class charged to the quota under the immigration act of 1924; 8,537 were admitted as returning residents; and 891 as wives and children of United States citizens. Visitors for business or pleasure numbered 3,064, and 1,447 passed through the country on their way elsewhere. Ninety-six ministers and professors and their wives and children, 93 students, and 197 veterans of the World War and their wives and children were also among the aliens admitted this month.

During the same month 13,981 aliens departed from the United States, the emigrant class comprising 3,928 and the nonemigrant 10,053. Nearly one-third of the emigrants gave Italy as their intended future permanent residence, while 223 went to Great Britain and Ireland, 152 to Greece, 133 to Germany, and 89 to the Scandinavian countries.

The number of persons debarred from entering the United States was 1,499 for January, 1,120 being males and 379 females. Only 80 of these aliens were rejected at New York and 120 at the other seaports. The remaining 1,299 were turned back at the land border stations, 1,171 to Canada and 128 to Mexico.

Aliens deported from the country during January last under warrant proceedings numbered 900. Some of the principal causes for these deportations were entering without immigration visa (460), criminal and immoral classes (134), likely to become a public charge (61), and insanity and other mental conditions (55). The compiled figures show that 742 of these undesirable aliens, or 82.4 per cent of the total deported in January, entered the country without proper inspection under the immigration laws, and that over two-thirds of this number entered surreptitiously either over the Canadian boundary or from south of the Rio Grande.

The January deportees went to nearly every part of the world. Europe, with 344, received the largest number; 258 were sent to Mexico; 210 to Canada; and 88 to other countries. These deportations were effected at Government expense in the cases of 599 aliens, 212 were permitted to depart at their own expense or reship with a foreign port as their destination, and 89 were returned at the expense of the steamship companies bringing them to our shores.

Canada, Germany, Mexico, Great Britain, and the Irish Free State, in the order named, were the principal countries from which the immigrant aliens came during January, 1927, over four-fifths of the total immigration this month coming from these six countries.

TABLE 1.—INWARD AND OUTWARD PASSENGER MOVEMENT FROM JULY 1, 1926, TO JANUARY 31, 1927

Period	Inward					Aliens debarred from entering [1]	Outward					Aliens deported after landing [2]
	Aliens admitted			United States citizens arrived	Total		Aliens departed			United States citizens departed	Total	
	Immigrant	Non-immigrant	Total				Emigrant	Non-emigrant	Total			
1926												
July	22,283	16,096	38,379	25,981	64,360	1,746	7,052	17,970	25,022	60,223	85,245	816
August	29,286	20,467	49,753	52,683	102,436	1,601	7,376	15,410	22,786	42,248	65,034	1,121
September	35,297	25,680	60,977	71,268	132,245	1,817	6,634	16,392	23,026	26,268	49,294	885
October	34,528	22,059	56,587	34,176	90,763	1,566	5,377	13,803	19,180	18,150	37,330	1,100
November	30,756	16,185	46,948	21,844	68,785	1,713	6,859	13,078	19,937	17,992	37,929	1,085
December	23,805	11,803	35,601	16,777	52,385	1,915	9,481	16,875	26,356	19,608	45,964	1,241
1927												
January	18,804	9,219	28,023	16,913	44,936	1,499	3,928	10,053	13,981	21,483	35,464	900
Total	194,759	121,509	316,268	239,642	555,910	11,857	46,707	103,581	150,288	205,972	356,260	7,148

[1] These aliens are not included among arrivals, as they were not permitted to enter the United States.
[2] These aliens are included among aliens departed, they having entered the United States, legally or illegally, and later being deported.

TABLE 2.—IMMIGRANT ALIENS ADMITTED TO AND EMIGRANT ALIENS DEPARTED FROM THE UNITED STATES DURING JANUARY, 1927, AND FROM JULY 1, 1926, TO JANUARY 31, 1927, BY RACE OR PEOPLE, SEX, AND AGE GROUP

Race or people	Immigrant		Emigrant	
	January, 1927	July, 1926, to January, 1927	January, 1927	July, 1926, to January, 1927
African (black)	33	550	85	535
Armenian	36	574	1	35
Bohemian and Moravian (Czech)	195	1,813	34	872
Bulgarian, Serbian, and Montenegrin	28	395	55	987
Chinese	44	821	365	2,769
Croatian and Slovenian	41	435	5	185
Cuban	64	1,241	77	546
Dalmatian, Bosnian, and Herzegovinian	3	39	24	270
Dutch and Flemish	229	1,902	44	508
East Indian	4	39	3	60
English	2,408	25,838	319	4,120
Finnish	28	397	7	262
French	1,196	12,500	65	955
German	4,080	33,068	162	2,394
Greek	77	1,361	153	2,037
Hebrew	797	6,411	16	149
Irish	2,019	27,084	40	996
Italian (north)	139	1,470	142	1,733
Italian (south)	724	9,053	1,105	12,008
Japanese	15	414	97	678
Korean	1	33		33
Lithuanian	27	289	2	207
Magyar	49	661	25	529
Mexican	3,359	32,816	306	1,715
Pacific Islander		5		6
Polish	173	2,595	81	1,646
Portuguese	62	504	74	1,843
Rumanian	38	212	38	758
Russian	70	752	17	306
Ruthenian (Russniak)	28	247		10
Scandinavian (Norwegians, Danes, and Swedes)	996	10,615	115	1,995
Scotch	1,496	16,225	98	1,471
Slovak	46	229	13	434
Spanish	42	601	137	1,761
Spanish American	134	1,759	96	936
Syrian	26	483	7	109
Turkish		58	8	103
Welsh	68	775	1	39
West Indian (except Cuban)	13	238	103	566
Other peoples	16	257	8	136
Total	18,804	194,759	3,928	46,707
Male	11,006	109,544	3,156	34,055
Female	7,798	85,215	772	12,652
Under 16 years	2,669	31,149	129	1,766
16 to 44 years	14,494	145,836	2,961	34,393
45 years and over	1,641	17,774	838	10,548

TABLE 3.—LAST PERMANENT RESIDENCE OF IMMIGRANT ALIENS ADMITTED TO AND FUTURE PERMANENT RESIDENCE OF EMIGRANT ALIENS DEPARTED FROM THE UNITED STATES DURING JANUARY, 1927, AND FROM JULY 1, 1926, TO JANUARY 31, 1927, BY COUNTRY

[Residence for a year or more is regraded as permanent residence]

Country	Immigrant		Emigrant	
	January, 1927	July, 1926, to January, 1927	January, 1927	July, 1926, to January, 1927
Albania	6	130	10	164
Austria	64	595	15	257
Belgium	53	468	24	260
Bulgaria	6	172	9	85
Czechoslovakia	224	2,103	47	1,181
Danzig, Free City of	3	171	2	4
Denmark	100	1,381	15	336
Estonia	4	110		9
Finland	21	266	7	239
France, including Corsica	314	2,635	53	795
Germany	3,547	28,092	133	2,096
Great Britain and Northern Ireland:				
England	552	5,580	155	2,859
Northern Ireland	15	143	10	154
Scotland	714	7,170	41	1,138
Wales	44	642	2	26
Greece	43	1,129	152	2,038
Hungary	34	494	22	455
Irish Free State	842	16,090	15	678
Italy, including Sicily and Sardinia	755	9,719	1,237	13,704
Latvia	33	279		8
Lithuania	47	372	2	200
Luxemburg		45		4
Netherlands	141	1,004	7	203
Norway	392	3,158	47	1,031
Poland	501	5,261	73	1,617
Portugal, including Azores, Cape Verde, and Madeira Islands	54	369	73	1,836
Rumania	90	695	31	766
Russia	90	741	6	144
Spain, including Canary and Balearic Islands	16	274	103	1,467
Sweden	328	4,653	27	500
Switzerland	124	1,234	16	326
Turkey in Europe	5	124	1	16
Yugoslavia	59	682	51	1,252
Other Europe	11	251		4
Total, Europe	9,232	96,192	2,386	35,852
Armenia		6		15
China	57	1,028	366	2,820
India	3	62	5	88
Japan	17	458	100	709
Palestine	5	274	10	108
Persia	5	26	1	19
Syria	17	396	2	89
Turkey in Asia	1	28	6	52
Other Asia	12	144		28
Total, Asia	117	2,422	490	3,928
Canada	5,409	54,744	213	1,053
Newfoundland	114	1,736	9	231
Mexico	3,436	35,378	304	1,718
Cuba	133	1,889	110	850
Other West Indies	34	537	230	1,437
British Honduras	3	84	1	10
Other Central America	36	876	42	368
Brazil	54	575	6	125
Other South America	170	1,575	96	733
Total, America	9,389	95,394	1,011	6,525
Egypt	9	131		14
Other Africa	12	171		52
Australia	33	265	29	229
New Zealand	6	155	11	88
Other Pacific Islands	6	29	1	19
Total, others	66	751	41	402
Grand total, all countries	18,804	194,759	3,928	46,707

TABLE 4.—ALIENS ADMITTED TO THE UNITED STATES UNDER THE IMMIGRATION ACT OF 1924 DURING JANUARY, 1927, AND FROM JULY 1, 1926, TO JANUARY 31, 1927, BY COUNTRY OR AREA OF BIRTH

[Quota immigrant aliens are charged to the quota; nonimmigrant and nonquota immigrant aliens are not charged to the quota]

Country or area of birth	Annual quota	Admitted					
		Quota immigrant		Nonimmigrant and nonquota immigrant		Total during January, 1927	Total, July 1, 1926, to Jan. 31, 1927
		July 1, 1926, to Jan. 31, 1927	January, 1927	July 1, 1926, to Jan. 31, 1927	January, 1927		
Albania	100	50	1	422	28	29	472
Andorra	100	3		3			6
Austria	785	499	61	1,032	84	145	1,531
Belgium	[1] 512	329	44	1,062	68	112	1,391
Bulgaria	100	103		150	13	13	253
Czechoslovakia	3,073	1,940	235	2,536	153	388	4,476
Danzig, Free City of	228	165	3	37	2	5	202
Denmark	[1] 2,789	1,471	125	1,315	88	213	2,786
Estonia	124	108	4	79	5	9	187
Finland	471	259	20	1,189	69	89	1,448
France	[1] 3,954	2,156	271	4,090	275	546	6,246
Germany	51,227	28,656	3,608	9,391	746	4,354	38,047
Great Britain and Northern Ireland:							
England	[1] 34,007	6,942	812	16,185	1,161	1,973	23,127
Northern Ireland		403	46	331	28	74	734
Scotland		7,903	820	6,578	407	1,227	14,481
Wales		701	52	683	34	86	1,384
Greece	100	111	1	2,425	129	130	2,536
Hungary	473	297	32	1,230	98	130	1,527
Iceland	100	45	4	13	1	5	58
Irish Free State	28,567	18,193	1,142	3,808	183	1,325	22,001
Italy	[1] 3,845	2,516	300	19,434	1,299	1,599	21,950
Latvia	142	133	15	186	12	27	319
Liechtenstein	100	16	1			1	16
Lithuania	344	176	12	576	62	74	752
Luxemburg	100	47	1	88	4	5	135
Monaco	100	5		5			10
Netherlands	[1] 1,648	896	115	1,654	157	272	2,550
Norway	6,453	3,311	429	2,671	200	629	5,982
Poland	5,982	3,551	342	4,384	484	826	7,935
Portugal	[1] 503	283	46	1,468	130	176	1,751
Rumania	603	436	69	1,188	91	160	1,624
Russia	[1] 2,248	1,218	148	1,938	216	364	3,156
San Marino	100	72		2	1	1	74
Spain	[1] 131	114	8	3,035	333	341	3,149
Sweden	9,561	4,977	377	2,668	125	502	7,645
Switzerland	2,081	1,144	111	1,735	120	231	2,879
Turkey in Europe	[1] 100	64	3	877	39	42	941
Yugoslavia	671	389	30	1,598	106	136	1,987
Other Europe	(1)	161	14	105	6	20	266
Total, Europe	[1] 161,422	89,843	9,302	96,171	6,957	16,259	186,014
Afghanistan	100	1		1			2
Arabia	100	7		1			8
Armenia	124	38	8	65	3	11	103
Bhutan	100	1					1
China	100	94	9	5,830	330	339	5,924
India	100	64	6	335	27	33	399
Iraq (Mesopotamia)	100	58	2	22		2	80
Japan	100	20		4,257	289	289	4,277
Muscat	100			2			2
Nepal	100						
Palestine	100	118	4	223	13	17	341
Persia	100	69	5	67	7	12	136
Siam	100	1		18			19
Syria	100	102	3	569	37	40	671
Turkey in Asia	(1)	33		300	26	26	333
Other Asia	(1)	126	16	106	6	22	232
Total, Asia	1,424	732	53	11,796	738	791	12,528

[1] Annual quota for colonies, dependencies, or protectorates in Other Europe, Other Asia, Other Africa, Other Pacific, and in America is included with the annual quota for the European country to which they belong. Quota for Turkey in Asia is included with that for Turkey in Europe.

TABLE 4.—ALIENS ADMITTED TO THE UNITED STATES UNDER THE IMMIGRATION ACT OF 1924 DURING JANUARY, 1927, AND FROM JULY 1, 1926, TO JANUARY 31, 1927, BY COUNTRY OR AREA OF BIRTH—Continued

Country or area of birth	Annual quota	Admitted					
		Quota immigrant		Nonimmigrant and nonquota immigrant		Total during January, 1927	Total, July 1, 1926, to Jan. 31, 1927
		July 1, 1926, to Jan. 31, 1927	January, 1927	July 1, 1926, to Jan. 31, 1927	January, 1927		
Cameroon (British)	100	1		2	1	1	3
Cameroon (French)	100						
Egypt	100	70	2	74	6	8	144
Ethiopia	100			1			1
Liberia	100	2		3			5
Morocco	100	12		11			23
Ruanda and Urundi	100						
South Africa, Union of	100	100	12	232	20	32	332
South West Africa	100						
Tanganyika	100						
Togoland (British)	100						
Togoland (French)	100						
Other Africa	(1)	39	4	66	3	7	105
Total, Africa	1,200	224	18	389	30	48	613
Australia	121	105	8	2,174	108	116	2,279
Nauru	100						
New Zealand	100	84	7	631	46	53	715
New Guinea	100						
Samoa	100	3		6			9
Yap	100			3			3
Other Pacific	(1)	13	7	104	15	22	117
Total, Pacific	621	205	22	2,918	169	191	3,123
Canada				53,036	4,901	4,901	53,036
Newfoundland				2,910	206	206	2,910
Mexico				42,252	4,266	4,266	42,252
Cuba				5,708	534	534	5,708
Dominican Republic				548	34	34	548
Haiti				135	8	8	135
British West Indies		[1] 359	31	2,734	250	281	3,093
Dutch West Indies		[1] 15		89	7	7	104
French West Indies		[1] 23	1	35	4	5	58
British Honduras		[1] 36		53	2	2	89
Canal Zone		(1)		10	3	3	10
Other Central America		(1)		1,960	120	120	1,960
Brazil		(1)		850	72	72	850
British Guiana		[1] 35	5	87	9	14	122
Dutch Guiana		[1] 2		11	1	1	13
French Guiana		(1)					
Other South America		(1)		3,062	275	275	3,062
Greenland		(1)		2			2
Miquelon and St. Pierre		[1] 3		35	5	5	38
Total, America		473	37	113,517	10,697	10,734	113,990
Grand total, all countries	164,667	[2] 91,477	9,432	224,791	18,591	28,023	316,268

[1] Annual quota for colonies, dependencies, or protectorates in Other Europe, Other Asia, Other Africa, Other Pacific, and in America, is included with the annual quota for the European country to which they belong. Quota for Turkey in Asia is included with that for Turkey in Europe.

[2] Also includes aliens to whom visas were issued during the latter part of the fiscal year ended June 30, 1926, and charged to the quota for that year. (Nationality for quota purposes does not always coincide with actual nationality. See section 12 of the act.)

TABLE 5.—ALIENS ADMITTED TO THE UNITED STATES UNDER THE IMMIGRATION ACT OF 1924, DURING JANUARY, 1927, AND FROM JULY 1, 1926, TO JANUARY 31, 1927, BY SPECIFIED CLASSES

[The number of immigrants appearing in this table and in Table 4 is not comparable with the number of statistical immigrant aliens shown in the other tables, by races, countries, States, and occupations]

Class	January, 1927	July 1, 1926, to January 31, 1927
Nonimmigrants		
Government officials, their families, attendants, servants, and employees	298	3,379
Temporary visitors for—		
Business	1,587	13,021
Pleasure	1,477	20,782
In continuous passage through the United States	1,447	15,345
To carry on trade under existing treaty	65	746
Total	4,874	53,273
Nonquota immigrants		
Wives of United States citizens	[1] 489	[1] 5,230
Children of United States citizens	[1] 402	[1] 4,212
Residents of the United States returning from a visit abroad	3,832	59,341
Natives of Canada, Newfoundland, Mexico, Cuba, Haiti, Dominican Republic, Canal Zone, or an independent country of Central or South America	[2] 8,537	[2] 95,472
Their wives	[1] 58	[1] 553
Their children	[1] 12	[1] 97
Ministers of religious denominations	40	383
Wives of ministers	19	196
Children of ministers	31	372
Professors of colleges, academies, seminaries, or universities	6	114
Wives of professors		30
Children of professors		11
Students	93	1,424
Veterans of the World War	117	2,977
Wives of veterans	36	481
Children of veterans	44	623
Spanish subjects admitted into Porto Rico	1	2
Total	13,717	171,518
Quota immigrants (charged to quota)	9,432	91,477
Grand total admitted	28,023	316,268

[1] Wives, and unmarried children under 18 years of age, born in quota countries.
[2] Does not include aliens born in nonquota countries, who were admitted under the act as Government officials, visitors, returning residents, etc.

Immigration Movement in the State of Sao Paulo, Brazil, 1926

ACCORDING to a communication from the American consul, Herndon W. Goforth, at Sao Paulo, Brazil, dated January 17, 1927, 96,887 immigrants entered the State in 1926 while there were 73,335 who entered in 1925, which had been the record year for immigration into this State since the World War.

The State of Sao Paulo subsidizes the immigration of agricultural workers for the coffee plantations. Brazilian consular officers in Europe select the immigrants and grant them free visas. The State director of immigration gives his approval to certain steamship companies whose agents arrange the immigrants' rail transportation in Europe and ocean transportation to Brazil, the State paying approximately $75 per person transported. Upon the arrival of the immigrants in Brazil, the State furnishes free passage to the city of Sao Paulo, where the immigration station provides food, lodging, and medical attention until they are assigned to some plantation. An employment office maintained by the State keeps a daily record of the requests for agricultural workers as well as a list of the available supply.

Although as a result of this plan the State received many thousands of immigrants, many of them from northern Europe could not adapt themselves to the hard living conditions met with in the interior and returned to the city of Sao Paulo to work in the factories, while hundreds of them applied for visas for the United States.

Press dispatches indicate that immigrants from Italy, Portugal, and Spain are preferred by the coffee planters since their attempts to keep them on the plantations have been more successful.

Immigrant Labor in French Coal Mines

IN recent years the coal-mining companies of France have been endeavoring to attract and retain substantial numbers of foreign laborers, according to an article[1] reviewed in the Monthly Record of Migration of January, 1927, published by the International Labor Office (Geneva).

It is reported that 75,000 immigrants have been brought in to meet the reconstruction and production needs in the French coal mines. Recruits were at first drawn from Italy and Poland, but subsequently most of these foreign workers were secured from the latter country.

In connection with this recruitment of foreign labor the mining companies have constructed at heavy expense thousands of new houses, constituting workers' towns, and have established many social institutions. For their Polish workers especially, the mine operators have contributed to the opening of numerous schools, have endeavored to meet the cultural requirements of these workers, and have encouraged undertakings to improve their intellectual life and to enable them to learn French. A special service was organized to superintend the transportation of the furniture of Polish workers from the recruiting localities to their mining destination. The purpose of these various efforts was to promote the assimilation of these Poles without prejudice to their national feeling.

The introduction of this large body of immigrants by the coal operators "is attributed both to the necessity of developing production and to the diminished returns of the workers employed on the surface and in the mines." The war made serious inroads into the local population, and the results will be felt for some years to come. At present, however, the coal companies have decided to limit their recruitment of mine labor to that necessary to keep their staffs at their existing figures. "When a certain maximum number of miners employed is exceeded, though the absolute return continues to increase, the relative return per miner diminishes and the security of the staff can no longer be so well assured."

The organization for recruiting immigrant workers instituted by the French Mine Owners' Central Committee has made its services available to other French employers who wish to secure foreign labor, bringing into France more than 30,000 Poles for industrial and agricultural undertakings.

Data on the foreign labor forces of important mining companies in various sections of France are given below:

[1] Le Temps, Paris, Nov. 2, 1926: "Les Houillères de France."

In the basin of the Nord and the Pas-de-Calais the Aniche Mining Co. has in its effective personnel (which amounts to 18,000 workers in all) a large number of foreigners and the Dourges Mining Co. employed in 1925 1,622 foreigners, mostly Polish, out of a total of 9,968 workers. With the Ostricourt Mining Co. the number of Polish workers has risen from 2,180 in 1922 to 3,620 at the present time; the Polish element thus amounts to 58 per cent of the total effective strength (which is 6,200) and 72 per cent of the workers employed below ground. The total Polish population of Ostricourt is estimated at 8,650 persons, comprising 1,300 families.

One-half of the 7,000 in the personnel of the Mining Corporation of the Loire (St. Etienne) are foreigners, a large majority being Poles, Italians, and Moroccans. Of the 4,650 workers employed by the Coal Mining Corporation of Montrambert and La Béraudière 1,500 are foreigners, while 27 per cent of the workers of the Mining Company of Roche-la-Molière and Firminy are foreign, the total force including at the present time almost 7,000. Before the war only 10 per cent of the personnel were foreign. The Italians formerly outnumbered the other workers, but there are now large numbers from Poland and Morocco. Since the war the Albi Mining Co. in the Tarn has requested many foreign laborers, and in 1925 one-third of the 10,368 workers of the Blanzy Coal Mining Corporation in Saone and Loire were foreigners.

French Legal Measures for the Protection of the Domestic[1] Labor Market against Immigration

THE act of August 11, 1926, for the protection of the native workers of France against immigrant labor, and a decree of November 30, 1926,[2] regarding identification cards for foreigners are complementary measures. Under the above-mentioned law, which modifies articles 64, 98, and 172 of Volume II of the Labor Code, the employment of a foreigner without an identification card conforming to existing regulations and bearing the word "worker" is prohibited. When an identification card is issued to a worker for the first time, it should contain the date of the labor contract for which such card is given

The foreign worker can not engage in a trade other than that for which the identification card was secured unless a year has elapsed since such card was issued or he has a certificate from a public employment office.

The law also forbids employers to solicit to enter their employment directly or indirectly, foreign workers who are still engaged under the contract under which they came to France.

Every employer of foreign workers is required to enroll them on a special register within 24 hours after engagement of such workers. The fine for each proved violation of this provision is from 500 to 1,000 francs.[3]

The decree of November 30 requires every foreigner over 15 years of age coming to stay in France more than two months to present himself within 48 hours of his arrival at the police commissioner's office or at the mayor's office of the locality where he resides, to

[1] Questions Pratiques. Droit Ouvrier Économie Politique et Sociale, Lyon, November-December, 1926, pp. 168, 169.
[2] Repeats most of the provisions of the decree of Sept. 1, 1925, concerning the same matter.
[3] Franc at par = 19.3 cents; exchange rate for Feb., 1927, was 4.55 cents.

request an identification card. In case such foreigner should change his domicile, he must within 48 hours of his arrival in his new place of residence present his identification card at the mayor's office or to the police commissioner. The identification card is good for two years. In case such card is refused or withdrawn, the foreigner must leave French territory within eight days.

Foreign workers who present themselves to immigration bureaus or to stations on the frontier and hold a guaranty of employment complying with the conditions prescribed by the Ministries of Labor and Agriculture are afforded safe conduct through the good offices of the special frontier commissioner to the place of their employment (subject to sanitary and police regulations).

Within 48 hours of his arrival in the place of his employment, a foreign worker must report his presence to the police commissioner or mayor and furnish the evidence requisite for the issuance of a regular card of identification, which will be delivered to him after the prefecture has made an inquiry into the matter with favorable results.

If a foreigner who has an identification card as an agricultural worker desires to become an industrial worker, he must make application for a new card.

Proprietors, hotel keepers, and lodging-house keepers must inform the commissioner of police within 24 hours of the presence of foreigners residing on their property.

When a card of identification is issued or renewed, a tax of 375 francs is levied, 300 of which goes to the State, 25 to the department, and 50 to the community. In the case of students or scholars living in France and belonging to the personnel of a foreign university, writers, salaried employees, etc., this tax is reduced to 40 francs.

Violations of this decree make one liable to the penalties provided in article 471, section 15, of the Penal Code, without prejudice to the right of expulsion by the Minister of the Interior under the law of December 3, 1849 (article 7).

Restrictions upon Immigration into Panama

THE immigration into Panama of Chinese, Japanese, Syrians, Turks, East Indians, Hindu-Arians, Dravidians, and Negroes of the Antilles and the Guianas, whose native language is not Spanish, is forbidden according to the provisions of the new immigration law (No. 13) of Panama, which was signed by the President on October 23, 1926, and published in the Gaceta Oficial of October 28, 1926. The above-mentioned aliens shall not be admitted even if they have become citizens of another country, nor may they return after having left Panama for a temporary period, even though they had been domiciled there previously. Aliens from whose country Panamans are barred shall not be admitted. No individual who has been expelled from any other country will be permitted to enter Panama, regardless of race, condition, class, civil status, profession or trade, unless his expulsion was due to a political offense.

Those aliens will be excepted who, prior to the enforcement of this law were married to Panamans or who own real estate or prove irre-

futably that they have resided in Panama for a period of 10 years or more engaged in some profession or trade and that during that time have been of good conduct. Their passports shall bear their fingerprints, photographs, and all other identification data.

Aliens whose immigration is prohibited by this law and who enter the Republic while this law is in force shall be fined 500 balboas [1] or sentenced to imprisonment for one year at hard labor on public works and shall be deported from the country as soon as the fine is paid or the sentence served. Persons responsible for the introduction of aliens whose immigration is forbidden by this law shall be imprisoned for a period of from one to six months for the first offense and from three months to one year for each subsequent offense.

Persons or companies employing immigrants who have secretly and unlawfully entered the country shall be considered as accomplices of such transgressors and shall be subject to a fine of 250 balboas for each immigrant. Steamship enterprises or companies bringing to the country individuals whose immigration is forbidden will incur a fine of 500 balboas and will be forced to furnish each immigrant with return passage to the port of embarkation.

Any person who reports the secret entry of an alien whose immigration is forbidden by this law shall be entitled to one-half of the fine imposed as the result of such report, as soon as it has been deposited in the National Treasury.

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[1] Balboa at par=$1.

ACTIVITIES OF STATE LABOR BUREAUS

AMONG the labor activities of State bureaus the following, reported either directly by the bureaus themselves or through the medium of their printed reports, are noted in the present issue of the Labor Review:

California.—Changes in volume of employment and pay roll in 794 establishments in the State, page 126.

Colorado.—Collection of wage claims, page 29.

Illinois.—Changes in employment and earnings in factories, page 128.

Iowa.—Changes in volume of employment in 315 establishments, page 130.

Maryland.—Report on volume of employment in that State, page 131.

Massachusetts.—Minimum wage developments, page 32, and changes in volume of employment in various industries, page 132.

Minnesota.—Report of operations under the State workmen's compensation act, page 44; wages and hours of women and boys, 1925, page 56; and training and placement of the deaf, page 61.

New Hampshire.—Industrial accidents, 1925 and 1926, page 39.

New York.—Changes in employment and pay rolls in some 1,600 factories, page 133.

Oklahoma.—Changes in employment and pay rolls in 710 establishments, page 135.

West Virginia.—Average annual wages, page 99.

Wisconsin.—Changes in employment and pay rolls in various industries in the State, page 135.

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Abstract in Metal Work, June 28, 1918, v. 89, p. 857; excerpts in Iron Trade Review, February 7, 1918, v. 62, pp. 381, 382, and discussion in American Institute of Mining Engineering, Bulletin 136, April, 1918, pp. 881–887.

REDUCING LABOR TURNOVER AT COAL MINES.
Labor Review, May, 1925, pp. 30, 31.

REDUCING LABOR TURNOVER BY INSURANCE.
Automobile, April 5, 1917, v. 36, pp. 704, 705.

REDUCING LABOR TURNOVER: That of Ford Motor Co. lowered from 370 per cent to 16 per cent in two years.
Iron Age, December 12, 1918, v. 102, p. 1463.

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Planning promotion for employees and its effect in reducing labor turnover.
Annals of the American Academy of Political and Social Science, May, 1917, v. 71, pp. 136–139.

ROCKENFIELD, W. A.
Reducing labor turnover.
Machinery, July, 1920, v. 26, pp. 1053, 1054.

SCHNEIDER, HERMAN.
Selecting young men for particular jobs.
(*In* Bloomfield, Meyer: Readings in Vocational Guidance. New York, Ginn, [c. 1915] pp. 368–378.)

SCOTT, W. D., AND CLOTHIER, R. C.
Labor turnover.
(*In their* Personnel Management. New York, A. W. Shaw Co., 1923, pp. 447–479, 538–563.)

SHEFFERMAN, N. W.
Labor turnover.
(*In his* Employment Methods. New York, The Ronald Press Co., 1920, pp. 189–199.)

SHERIDAN, J. E.
Reducing labor turnover.
100 %, June, 1916, v. 6, No. 6, pp. 92–96.

SHIDLE, N. G.
New employee as a vital factor in labor turnover.
Automotive Industries, May 27, 1920, v. 42, pp. 1216–1218.

—— Reducing the labor turnover by developing the individual.
Automotive Industries, April 29, 1920, v. 42, pp. 1015–1017.

SIMONS, A. M.
Labor turnover.
(*In his* Personnel Relations in Industry. New York, 1921, pp. 214–232.)

SLICHTER, SUMNER H.
Scope and nature of the labor turnover problem.
Quarterly Journal of Economics, February, 1920, pp. 329–345.
Thorough analysis of the relative merits of replacements and separations as units of measurement.

SPEEK, PETER A.
Report [to U. S. Commission on Industrial Relations] on psychological aspects of floating laborers.—An analysis of life stories. June 25, 1915. 113 pp., typewritten.
Appendix 2: Copies of record cards of typical floating laborers applying at the State free employment office, Milwaukee, Wis., showing the number and nature of jobs during certain periods of time.

UNITED STATES. *Department of Labor. Bureau of Labor Statistics.*
Proceedings of the conference of Employment Managers' Association of Boston, Mass., held May 10, 1916. Washington, 1916. 64 pp. (*Its* Bulletin No. 202.)

—— —— —— Proceedings of employment managers' conference, held at Minneapolis, January 19 and 20, 1916. Washington, 1916. 82 pp. (*Its* Bulletin No. 196.)

Includes The new apprenticeship as a factor in reducing labor turnover, by Charles A. Prosser, director of Dunwoody Industrial Institute, Minneapolis, Minn., pp. 45–52; Work of the employment department of the Ford Motor Co., by George Bundy, employment manager, pp. 63-71.

—— —— —— Proceedings of the employment managers' conference, Philadelphia, Pa., April 2 and 3, 1917. Washington, 1917. 210 pp. (*Its* Bulletin No. 227.)

Also in Labor Review, June, 1917, v. 4, pp. 890–900.

—— —— —— Proceedings of the employment managers' conference, Rochester, N. Y., May 9–11, 1918. Washington, 1919. 249 pp. (*Its* Bulletin No. 247.)

Contains labor turnover schedules of United States Bureau of Labor Statistics, pp. 66–71, 206–212, 224–227.

—— —— *Training Service.*
Labor turnover and industrial training. Washington, 1919. 8 pp. (*Its* Bulletin No. 6.)

—— *Federal Board for Vocational Education.*
Turnover of labor, by Boris Emmet. Washington, 1919. 60 pp. (*Its* Bulletin No. 46.)

General treatment of the subject, treating causes, costs, methods of computation, and methods of reduction of turnover.

WALKER, C. A.
Reducing the turnover of labor.
Iron Trade Review, January 31, 1924, v. 74, pp. 350–352.

WATKINS, G. S.
Analysis of labor turnover.
Administration, July, 1921, v. 2, pp. 27–35.

WEINGER, W. H.
Labor turnover and a remedy.
American Machinist, March 13, 1919, v. 50, pp. 497–499.

WILLIAMS, A. H.
Preventing excessive labor turnover.
Foundry, August, 1918, v. 46, p. 358.

WILLIAMS, JANE C.
Reduction of labor turnover in the Plimpton Press.
Annals of the American Academy of Political and Social Science, May, 1917, v. 71, pp. 71–81.

WILLIAMS, J. M.
An actual account of what we have done to reduce our labor turnover. 1917. 14 pp.

Reprinted in the Annals of the American Academy of Political and Social Science, May, 1917, v. 71, pp. 51–70, and in U. S. Bureau of Labor Statistics Bulletin No. 227, pp. 173–190.

The secretary for Fayette R. Plumb, of Philadelphia and New York, outlines in this address the methods of the corporation's employment department. Sample forms, data as to the results attained after the first few months of operation, and a brief discussion of the cost of changing employees are among the noteworthy features of this valuable paper.

WILLIAMS, R. B.
Relation of machines to labor turnover.
Blast Furnace and Steel Plant, January, 1925, v. 13, pp. 5–8.

WILLITS, JOSEPH H.
Labor turnover and the humanizing of industry.
Annals of the American Academy of Political and Social Science, September, 1915, v. 61, pp. 127–137.

WILSON, IDA MAY.
Women workers and labor turnover.
Industrial Management, January, 1919, v. 57, pp. 67, 68.

WINSOR, H. G.
Employment Bureau.
Electric Railway Journal, July 3, 1915, v. 46, pp. 9, 10.

Includes turnover figures.

WOODWARD, J. H.
Pension costs and the labor turnover factor.
Management and Administration, October, 1923, v. 6, pp. 483–486.

PUBLICATIONS RELATING TO LABOR

Official—United States

COLORADO.—Bureau of Labor Statistics. *Twentieth biennial report, 1925-26. Denver, 1926. 54 pp.*

Data on the collection of wage claims by the above-mentioned bureau are presented on page 29 of this issue.

MINNESOTA.—Industrial Commission. *Third biennial report [July 1, 1924, to June 30, 1926.] Minneapolis, 1927. 206 pp.*

Data from this report, on wages and hours of women and boys, training and placement of the deaf, and workmen's compensation, are published on pages 56, 61, and 44 of this issue.

MONTANA.—Industrial Accident Board. *Decisions of the Industrial Accident Board, including opinions on the workmen's compensation law by the attorney general and decisions by the Montana Supreme Court, July 1, 1915, to January 1, 1923. [Helena, 1926?]. 485 pp.*

This is the first published volume of decisions of the Montana Industrial Accident Board, and is said to contain only a small percentage of such decisions. Those deemed of importance and that have been used as precedents in other cases have been selected for publication. Both the table of contents and the index indicate the subject matter, and make available a large amount of interpretative material.

NEVADA.—Inspector of Mines. *Biennial report, 1925–26. Carson City, 1927. 80 pp.*

The approximate number of men employed in the mines, mills, and smelters of Nevada was 6,000 in 1925 and 6,200 in 1926. The number of fatal accidents was 19 from November 30, 1924, to November 30, 1925, and 18 for the succeeding 12 months.

NEW HAMPSHIRE.—Bureau of Labor. *Sixteenth biennial report, for the fiscal period ending June 30, 1926. Concord, 1926. 113 pp.*

Statistics on industrial accidents from this report are published on page 39 of this issue.

NEW YORK.—Department of Labor. *Proceedings of the tenth annual New York State Industrial Safety Congress held under the auspices of the Department of Labor of the State of New York, Rochester, N. Y., November 30–December 1–2, 1926. Albany, 1927. 253 pp., charts.*

The general subjects covered by the congress were: The State and accident prevention; industrial hygiene; industrial executives and accident prevention; the foreman and accident prevention; the larger aspects of industrial safety; trade and commercial organizations and accident prevention; and compensation insurance carriers and accident prevention.

—— —— Bureau of Industrial Hygiene. *The lead hazard and compensation, by May R. Mayers. New York, 1926. 28 pp., illus.*

This bulletin deals with the problem of the diagnosis of lead poisoning from the standpoint of workmen's compensation. Part I consists of a nontechnical description of the manner in which lead is absorbed into and eliminated from the body; the difficulties of diagnosis are discussed, and a standardized terminology is proposed as a means towards simplifying diagnosis. The second part gives instructions for physicians in preparing lead cases which are to appear for com-

pensation and a classification of cases under the proposed new terminology with a discussion of the application of the New York compensation law to these cases.

NORTH DAKOTA.—Coal Mine Inspection Department. *Eighth annual report, 1926. Bismarck [1927?]. 80 pp.*

The coal mines of the State are listed by county, the data including number of days each mine was operated and the number of miners and other workers employed. The text of the report gives a description of each mine, mentioning its condition at time of inspection, and a list of accidents which occurred at the various mines.

OHIO.—Department of Industrial Relations. Division of Labor Statistics. *Reports Nos. 9 and 11: Union scale of wages and hours of labor in Ohio on May 15, 1926. Columbus, 1926. 78 pp.*

The tabulations for 1926 in this report include approximately 92,430 trade-unionists in 16 cities, engaged, respectively, in the bakery, building, metal, printing (book and job and newspaper), and miscellaneous trades, and as teamsters and chauffeurs. Data for 1925 for the same trades from part of the report.

—— —— —— *Reports Nos. 10 and 12: Statistics of mines and quarries in Ohio, 1924–25. Columbus, 1926. 116 pp.*

Contains data on number of employees, wages and hours, production, and, in the case of coal mines, the number, causes, and frequency of fatal accidents in Ohio in 1924 and 1925.

WEST VIRGINIA.—Bureau of Labor. *Eighteenth biennial report, 1925–26. Charleston [1926?]. 114 pp., illus.*

Data from the report are published on page 99 of this issue.

A directory of industries, including number of workers employed by each firm, is given in the report.

UNITED STATES.—Congress. Senate. Committee on Education and Labor. *Hearing on S. 3983, a bill to create in the Bureau of Labor Statistics of the Department of Labor a Division of Safety, May 21 and June 2, 1926. Washington, 1926. 53 pp. (69th Cong., 1st sess.)*

—— Department of Commerce. Bureau of Foreign and Domestic Commerce. *Trade promotion series No. 42: British wages, by Charles E. Lyon. Washington, 1926. iv, 72 pp.*

A review of the section of this report describing methods of wage fixing in Great Britain is published on page 110 of this issue.

—— —— Bureau of Navigation. *Merchant Marine Statistics, 1926. Washington, 1927. iv, 82 pp.*

Average monthly wages of American and foreign seamen, taken from this report, are given on page 84 of this issue.

—— Department of Labor. Bureau of Immigration. *Immigration laws and rules of March 1, 1927. Washington, 1927. iv, 174 pp., map.*

—— —— Bureau of Labor Statistics. *Bulletin No. 421: Wages and hours of labor in the slaughtering and meat-packing industry, 1925. Washington, 1927. iii, 149 pp.*

An advance summary of this bulletin appeared in the Labor Review for May, 1926 (p. 60).

—— —— —— *Bulletin No. 424: Building permits in the principal cities of the United States in 1925. Washington, 1926. iii, 83 pp., chart.*

An advance summary of the findings of this investigation was published in the Labor Review for June, 1926 (p. 112). The data were secured early in 1926 by means of questionnaires sent to each of 287 cities having a population of 25,000 or over. Full reports were received from 274 of these cities. The October, 1926, issue of the Labor Review (p. 61) contained the results of a study of data con-

cerning building permits issued in the first six months of 1926 in the 78 cities of the United States having a population of 100,000 or over.

UNITED STATES.—Department of Labor. Bureau of Labor Statistics. *Bulletin No. 432: Proceedings of the thirteenth annual meeting of the International Association of Industrial Accident Boards and Commissions, held at Hartford, Conn., September 14–17, 1926. Washington, 1927. vii, 243 pp.*

—— —— —— *Bulletin No. 433: Safety codes for the prevention of dust explosions. (National Fire Protection Association and United States Department of Agriculture, sponsors.) Washington, 1927. iv, 40 pp.*

—— —— Women's Bureau. *Bulletin No. 57: Women workers and industrial poisons, by Dr. Alice Hamilton. Washington, 1926. 5 pp.*

A discussion of the employment of women in trades which expose them to the hazards of poisonous materials.

—— Government Printing Office. *Annual report of the Public Printer, 1926. Washington [1927?]. 122 pp.*

Data on productivity of employees in the Government Printing Office are given on page 28 of this issue.

—— —— Superintendent of Documents. *Labor, child labor, cost of living, reconstruction, employers' liability, insurance, wages, woman wage earners, strikes. List of publications relating to above subjects for sale by Superintendent of Documents. Washington, January, 1927. 27 pp. Price list 33.*

—— Navy Department. *Schedule of wages for civil employees under the Naval Establishment for the calendar year 1927. Washington, 1926. v, 50 pp.*

The schedules of wages for the clothing workers' service and the laborer, helper, and mechanical service are published on page 79 of this issue.

Official—Foreign Countries

AUSTRALIA.—[Department of the Treasury.] Pensions and Maternity Allowance Office. *Invalid and old-age pensions: Statement for the 12 months ended June 30, 1926. Melbourne, 1926. 10 pp.*

At the close of the fiscal year the number of old-age pensioners was 126,918 and of invalid pensioners, 48,803, which was an increase over the corresponding figures for 1925 of 9,402 in the first group, and of 3,963 in the second. The total expenditure during the year for both classes of pensions was £8,252,387, (pound at par=$4.87), and the cost of administration was £99,620, or £1 4s. 2d. for each £100 paid in pensions. For each 10,000 of the general population there were 212 old-age and 81 invalid pensioners.

—— —— —— *Maternity allowances: Statement showing number of claims granted and rejected, expenditure, and cost of administration during the 12 months ended June 30, 1926. Melbourne, 1926. 3 pp.*

During the year allowances were paid in 136,171 cases, and 517 claims were refused. The amount paid in maternity allowances was £680,855 (pound at par=$4.87), and the cost of administration was £15,702, or £2 6s. 1d. for each £100 paid in allowances. The number of allowances paid shows a slight falling off as compared with the preceding year, when 137,641 claims were allowed.

—— (TASMANIA).—Industrial Department. *Eleventh annual report for 1925–26, on factories, wages boards, shops, etc. Hobart, 1926. 25 pp.*

Shows a decrease in the number of factory employees from 9,854 at June 30, 1925, to 9,099 at June 30, 1926. During the year 2,212 persons applied to the State labor bureau for employment, and 2,411 were placed. On July 1, 1925, the Bureau had 913 still on its register, and on June 30, 1926, it had 714. During the period covered the department secured arrears of wages for 310 applicants, amounting to £1,323.

CANADA.—Department of Labor. *Prices in Canada and other countries, 1926. Ottawa, 1927. 32 pp. Issued as a supplement to the Labor Gazette, January, 1927.*

Data from this report are given on page 170 of this issue.

—— —— *Proceedings of the 14th annual meeting of the International Association of Public Employment Services, held at Montreal, Quebec, on September 16, 17, and 18, 1926. Ottawa, 1927. 85 pp., charts.*

Among the subjects discussed at the conference were: The harvest problem in Western Canada; The lumber industry and the problem of labor supply; Publicity for the employment service; The placement of handicapped workers; Organized labor and the public employment services; Cycles of unemployment in Canada; The employment of women in industry; Junior placement; and The relation of a municipal public assistance department to unemployment.

—— —— *Report for the fiscal year ending March 31, 1926. Ottawa, 1926. 121 pp., charts.*

The chief activities of the department are reviewed under the following heads: Industrial disputes investigation act; conciliation work; fair wages; statistics; Labor Gazette (monthly publication); combines investigation act; employment offices coordination act; technical education act; government annuities act; international labor organization.

—— —— *Wages and hours of labor report No. 10: Wages and hours of labor in Canada, 1920 to 1926. Ottawa, 1927. 62 pp. Issued as a supplement to the Labor Gazette, January, 1927.*

Data from this report are given on page 104 of this issue.

—— (QUEBEC).—Department of Public Works and Labor. *General report, for the year ending June 30, 1926. Quebec, 1926. 127 pp., illus.*

Includes data on industrial accidents, work of employment bureaus, and labor disputes.

—— (SASKATCHEWAN).—Bureau of Labor and Industries. *Sixth annual report, for the 12 months ended April 30, 1926. Regina, 1926. 58 pp.*

FRANCE.—Ministère du Travail. *Recueil de documents sur les accidents du travail, No. 55: Quinzième rapport sur l'application de la loi du 9 avril 1898, années 1921 et 1922. Paris, 1926. 98 pp.*

This report covers the general application of the French law relating to industrial accidents in 1921 and 1922, the financial condition of the insurance organizations registered under the said law, and the operations of the insurance funds.

GREAT BRITAIN.—Government Actuary. *National health insurance: Report by the Government actuary on the second valuation of the assets and liabilities of approved societies. London, 1927. 144 pp. (Cmd. 2785.)*

The result of the investigation conducted by the actuary shows that in spite of "the recent changes by which the State grant has been reduced and the charges upon the funds of the societies in regard to medical benefit have been increased, the financial basis of the scheme remains one of undoubted strength."

—— Home Office. *Statistics of compensation and of proceedings under the workmen's compensation acts, 1906 and 1923, and the employers' liability act, 1880, during the year 1925. London, 1927. 33 pp. (Cmd. 2784.)*

Some of the data contained in this report are given on page 51 of this issue.

—— Industrial Fatigue Research Board. *Report No. 39: The relation of atmospheric conditions to the working capacity and the accident rate of coal miners, by H. M. Vernon and T. Bedford. London, 1927. iv, 32 pp., chart.*

This study of the effects of temperature on the working capacity of miners was based on the duration of rest pauses taken from work and the time it took to fill a car with coal. In the higher temperatures there was shown to be an increase in the number of rest periods and in the time taken to fill the cars, while

the accident rate also appeared to be influenced unfavorably by adverse atmospheric conditions, as was also the general health of the miners.

GREAT BRITAIN.—Mines Department. *Fifth annual report of the Secretary for Mines, and the chief inspector of mines, for the year ended December 31, 1925. London, 1926. 212 pp., charts.*

A general review of the mining industry through 1925, with special reports on accidents, safety measures, and the like. During the year the output per unit of labor increased, the output per man shift being higher throughout the year than in 1923 or 1924, "and in the month of December it reached 18½ cwts., a higher rate of output than at any period since the 7-hour day below ground was introduced." During the year employment was poor, and the proportion of unemployed coal miners rose from 7.9 per cent at the end of 1924 to 25 per cent in June, and was only slightly less in August and September. During the last three months, when the Government subsidy to the coal owners was in effect, employment improved, and at the end of December the proportion was 11.3 per cent.

"At mines under the coal mines act, 1911 (mines of coal, stratified ironstone, shale, and fireclay), 226,979 persons were employed at the surface and 890,849 persons underground. The number of persons killed at these mines in 1925 was 1,136, and the number injured, 178,060, as compared with 1,201 and 195,423, respectively, in 1924." In coal mines the death rate per 1,000 persons employed above and below ground was 1.02 in 1925 and 0.98 in 1924, while the death rate per 100,000 man-shifts worked was 0.40 in 1925 and 0.38 in 1924.

—— Ministry of Labor. *Report on an investigation into the employment and insurance history of a sample of persons insured against unemployment in Great Britain. London, 1927. 108 pp.*

Reviewed on page 45 of this issue.

INTERNATIONAL LABOR OFFICE.—*International Labor Conference, Geneva, eighth session, 1926. Vols. I and II. Geneva, 1926. [Various paging.]*

—— *International Labor Conference, Geneva, ninth session, 1926. Geneva, 1926. lxvii, 692 pp.*

The proceedings of the eighth and ninth sessions of the International Labor Conference. The report of the director of the International Labor Office on the activities of the organization for the year 1925 forms volume 2 of the proceedings of the eighth session. The subject considered by the eighth session was the simplification of the inspection of immigrants on board ship. The items on the agenda of the ninth session were the international codification of the rules relating to seamen's articles of agreement and general principles for the inspection of the conditions of work of seamen. A brief account of the proceedings of these two sessions, taken from various issues of Industrial and Labor Information, the weekly publication of the International Labor Office, was published in the Labor Review for September, 1926 (p. 27).

—— *The International Labor Organization and women's work. Geneva, 1926. 21 pp.*

NETHERLANDS EAST INDIES.—Departement van Landbouw, Nijverheid en Handel. Centraal Kantoor voor de Statistiek. *Statistisch jaaroverzicht van Nederlandsch-Indië, 1925. Weltevreden, 1926. xxvii, 405 pp.*

Statistical abstract for the Netherlands East Indies for the year 1925. One section relates to prices and wages, and a section on industry contains data on production of coal and number of workers in coal mines.

SCOTLAND.—Board of Health. *Seventh annual report, 1925. Edinburgh, 1926. 326 pp. (Cmd. 2674.)*

Data on housing from this report appear on page 54 of this issue.

SPAIN.—Ministerio de Trabajo, Comercio e Industria. Dirección General de Trabajo y Acción Social. *Estadística de los accidentes del trabajo ocurridos en los años 1923 y 1924. Madrid, 1926. 102 pp.*

This report presents the number of industrial accidents in Spain in 1923 and 1924 and contains tables showing the Provinces in which they occurred and the sex and age of those injured as well as the severity of the accidents. A table taken from this report is given on page 42 of this issue.

Unofficial

AMERICAN LABOR YEAR BOOK, 1927. *New York, Rand Book Store, 1927. [8], 252 pp.*

The eighth edition of this work of reference, the character and arrangement of the material being similar to those of the earlier editions.

AMERICAN MANAGEMENT ASSOCIATION. *Production executives' series, No. 49: Employee representation technique. Proceedings of the conference at Chicago, November 18 and 19, 1926. New York, 20 Vesey Street, 1926. 68 pp.*

AMERICAN STATISTICAL ASSOCIATION. Committee on Governmental Labor Statistics. *Employment statistics for the United States: A plan for their national collection and a handbook of methods. Edited by Ralph G. Hurlin and William A. Berridge. New York, Russell Sage Foundation, 1926. xvi, 215 pp., charts.*

Reviewed on page 137 of this issue.

AMERIKAREISE DEUTSCHER GEWERKSCHAFTSFÜHRER. *Berlin, Allgemeiner Deutscher Gewerkschaftsbund, 1926. 256 pp., charts, maps, illustrations.*

This report of the German trade-union commission, which visited the United States in the latter part of 1925, for the purpose of studying industrial organization in this country, is reviewed on page 21 of this issue.

ANGELL, JAMES W. *The theory of international prices—history, criticism, and restatement. Cambridge, Harvard University Press, 1926. xiv, 571 pp., charts. Harvard economic studies, Vol. XXVIII.*

ARNOT, R. PAGE. *The general strike, May, 1926: Its origin and history. London, Labor Research Department, 1926. [5] 245 pp.*

Holding that the strike was neither an accident nor a conspiracy, the author treats it as a historical development, his purpose being "to discover exactly what happened; to find the chain of events which led thereto; to see what light can be had by a comparison with similar events in this country (i. e., 1842 Chartist strike) or in other countries; to lay bare the social forces; to describe the relation of classes and the change of those relations; to examine the other consequences, both at home and abroad."

BRISSAUD, LÉONCE. *Les accidents du travail en matière administrative. (Thèse pour le doctorat, sciences politiques et économiques.) Paris, Jouve et Cie, éditeurs, 1926. 108 pp.*

A study of French industrial accident legislation for persons in the employment of the State.

CALHOUN, ARTHUR W. *The worker looks at Government. New York, International Publishers, 1927. 176 pp.*

A discussion of the nature and functions of the various branches of the United States Government from the standpoint of labor, by an instructor in Brookwood Labor College. A series of questions follows each chapter, for use in study classes.

CARNEGIE ENDOWMENT FOR INTERNATIONAL PEACE. Division of Economics and History. *French industry during the war, by Arthur Fontaine. New Haven, Yale University Press, 1926. xxix, 477 pp., map.*

A translation and abridgement of the original treatise published in French.

CINCINNATI PUBLIC SCHOOLS. Vocation Bureau. *Vocational pamphlet No. 6: Street railway transportation in Cincinnati, by Rebecca Van Hamm. Cincinnati, 1926. 64 pp.*

This pamphlet is one of a series intended not only to help the student in choosing his own vocation, but also to give him some understanding of the varied industries carried on in the community, and of the relationships springing from them. It contains an analysis of the kinds of work required of street-railway employees, the qualifications necessary for the different positions, the hours and conditions of work, the comparative steadiness of employment, the rates of pay, the opportunities for promotion, and the like. A sketch of the development of the street-railway industry is added, and a bibliography on the subject is appended.

COX, JACOB D. *The economic basis of fair wages. New York, Ronald Press Co., 1926. ix, 139 pp., charts.*

This book, by the president of the Cleveland Twist Drill Co., develops the thesis that wage levels are the result of economic forces that can not be successfully controlled by either employer or employee; and that real wages have increased and will continue to increase with increased efficiency of production.

DUBUJADOUX, GEORGES. *Les bases rationnelles de la documentation industrielle. Un répertoire de la production française. Paris, Librairie générale de droit et de jurisprudence, 1926. ix, 176 pp.*

From a study of the annuals and records of industrial production in France and other countries the author concludes that such documents lack first of all a rational system of classification. He submits a tentative classification scheme with some interesting innovations.

INSTITUTE OF ECONOMICS. *Italy's international economic position, by Constantine E. McGuire. New York, Macmillan Co., 1926. xviii, 588 pp., maps, charts.*

This volume constitutes a general diagnosis of the economic condition of the Italian nation, with particular reference to international trade and financial relations. As regards present labor policies, the author holds that "the Fascist Administration has sought to guarantee a living wage to labor as a corner stone of its general economic policy."

INTERNATIONAL UNION OF WORKERS IN THE FOOD AND DRINK TRADES. *Report of the activities, presented by the Secretariat. Zurich [1925]. 128 pp.* [*Mimeographed.*]

A survey of the activities of the above-named organization for the five years following its establishment in 1920.

LABOR PARTY (Great Britain). *"On the dole"—or off! What to do with Britain's workless workers. London, 33 Eccleston Square, S. W., 1926. 32 pp.*

Sets forth the policy of the Labor Party concerning unemployment. According to the census figures there are in Great Britain close upon a million workers under 16, and more than three-quarters of a million over 65, and it is suggested that these two classes might well be taken out of the labor market. Productive capacity has so increased that a smaller number of workers can produce all that is needed or can be absorbed. Therefore, children under 16 might well be given an opportunity for longer training, and the age of retirement might be lowered. Moreover, training centers might well be established in which those unemployed at any given time should receive training which would fit them better for their work when they can regain it. For the prevention of unemployment, a number of lines of work are proposed, mainly hinging upon the development of national resources and economic possibilities, both in England and elsewhere.

"The chief lines of advance are the better use and development both at home and abroad of (*a*) land, (*b*) minerals, (*c*) transport, (*d*) power, (*e*) the improvement of manufacturing industries." Each of these possibilities is discussed at some length.

In addition, a more effective use of emigration is urged, involving schemes of training for prospective emigrants, Government assistance to settlers in undevel-

oped parts of the Empire, reciprocal social insurance in England and the Dominions, the protection of labor standards, and a more generous policy of assistance for Commonwealth development.

LAPORTE, H.-ANDRÉ. *Movements de salaires depuis 1914. Paris, Société Anonyme du Recueil Sirey, 1926. 173 pp.*

This thesis on the course of wages since 1914 is confined principally to the movement in France, although wage changes in Germany are also discussed. In his conclusion the author declares that the social and political upheavals born of the World War have not resulted in weakening the general scientific wage bases.

NATIONAL CONFERENCE OF SOCIAL WORK. *Proceedings at the 53d annual session held in Cleveland, Ohio, May 26–June 2, 1926. Chicago, University of Chicago Press, 1926. vi, 716 pp.*

The report includes the general sessions of the conference and 12 divisional meetings covering an immense range of activities for social progress. The majority of the more than 100 papers have a direct or indirect bearing on the wages and living conditions of the workers, especially in the low income groups. One divisional meeting, however, was devoted entirely to industrial and economic problems and dealt with the following subjects: The living wage and family allowance systems; Substitution of Negro labor for European immigrant labor; Social problems of our Mexican population; The Mexican immigrant in Texas; Trade-unions and the family welfare agency; The individual or "yellow dog" contract; and Progress in regularizing employment.

At the general sessions also three addresses concerned problems in the coal industry, and the subject of another was "International social action in industry" discussing the purpose and work of the international labor organization.

NATIONAL INDUSTRIAL CONFERENCE BOARD (INC.). *Clerical salaries in the United States, 1926. New York, 247 Park Avenue, 1926. ix, 48 pp., charts.*

This report presents detailed data on salaries for various kinds of clerical work. Eighteen cities were covered in the survey and a total of 427 companies, employing 27,376 office workers, furnished information. Owing to the unstandardized character of office work and the wide range of salaries paid, it was found undesirable to compute arithmetic averages, and, in consequence, the data are presented in frequency tables showing the range of salaries paid each occupational group. The report notes, however, that in six characteristic occupations involving "routine work performed under supervision" the "approximate average salary would appear to be close to $25 per week."

—— *The cost of living in New York City, 1926. New York, 247 Park Avenue, 1926. xiii, 129 pp., map, charts.*

The purpose of this investigation was to determine the cost of maintaining "a fair American standard of living in New York City." Separate estimates are given for industrial and clerical workers. The estimates for industrial workers are as follows:

	Yearly	Weekly
Family of man, wife, one child	$1,375.44	$26.45
Family of man, wife, two children	1,685.14	32.41
Family of man, wife, three children	1,880.17	36.16
Single man, living apart from family group	971.87	18.69
Single woman, living as part of family group	665.25	12.80

REHABILITATION REVIEW. *Vol. I, No. 1, January, 1927. New York, 30 East 23d Street.*

In this first number of the Rehabilitation Review, the editor in outlining the purpose and scope of the journal states that the development of the rehabilitation of disabled civilians and the acceptance of the new meaning of the word "rehabilitation," which indicates a complete program of the services rendered

the disabled individual, including everything from medical or surgical service to final placement in employment, has developed the need for a magazine which will discuss all these various services. It is the purpose of this publication, therefore, to assist in the coordination of those services which tend toward the solution of the economic and social problems of the disabled person.

SIMON, *Sir* JOHN. *Three speeches on the general strike, with an introduction, diary of events, and appendixes. London, Macmillan & Co. (Ltd.), 1926. xxv, 96 pp.*

Three speeches intended to show that the general strike was illegal, of which two were delivered in the House of Commons during the duration of the strike and the third at a public meeting soon after its close.

VINACKE, HAROLD M. *Problems of industrial development in China; a preliminary study. Princeton, Princeton University Press, 1926. xi, 205 pp.*

A study of the industrial development, and present organization of banking, commerce, and industry, in China. The author concludes that in the industrial reorganization which is going on China will not slavishly imitate the West, but will develop its own methods and organizations in the light of the past experience of that country.

WOO, VEN WAY. *Efficiency in railroad management: A study of the requirements of section 15a of the transportation act, 1920. [Philadelphia], University of Pennsylvania, 1926. [Various paging.]*